ASBESTOS SURVEY AND LEAD-BASED PAINT SCREENING REPORT

The Railroad Club
2908 P Street
Richmond, Virginia 23223

Prepared For:
City of Richmond Economic & Community Development
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Richmond, Virginia 23219

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1.0 INTRODUCTION

Froehling & Robertson, Inc. (F&R) conducted limited asbestos-containing materials consulting services on June 11, 12, and 25, 2018 at the former mixed-use commercial Property, known as The Railroad Club, located at 2908 P Street in Richmond, Virginia. It is F&R's understanding that the structure may be the subject of planned renovation and select demolition which may impact building materials. The following sections document the survey procedures and results. Refer to Appendix A for Personnel Accreditation documentation of F&R personnel associated with this survey.

1.1. Purpose

The purpose of the Limited Asbestos Survey is to identify Asbestos-Containing Materials (ACMs) that may require appropriate removal, handling, and disposal procedures prior to scheduled renovation and demolition activities at the subject property.

1.2. Site Description

The facility consists of an approximately 8,000 square foot partial two-story building with gravel topped membrane roofs. The structure is metal or concrete column framed and concrete masonry unit (CMU) foundation walls presumably on concrete spread footers with a concrete floor. A brick façade is present on all exterior sides of the building. The interior of the building was sectioned off to accommodate multiple different businesses. Interior finishes include vinyl floor tile, sheet vinyl flooring, gypsum board and plaster walls, gypsum board and plaster ceilings, and ceiling tile. Refer to Appendix B for site sketches and plans of the facility, including asbestos sample locations.

It should be noted that material and color descriptions are subjective and that, due to the nature of the environment, identical materials and colors may have been labeled as different depending on the lighting, other colors in the area, and other factors.

1.3. Background

F&R has previously performed a Phase I Environmental Site Assessment (ESA) dated February 15, 2018 (F&R Project Number 54V-0288) in general accordance with ASTM-1527-13 at the Property. Among the various conclusions and recommendations detailed in the Phase I ESA was the following non-scope consideration:

Based upon the date of construction of the buildings (1912), asbestos containing materials may be present on-site. Obvious evidence of damaged, friable asbestos was observed and suspect asbestos containing materials were also observed. However, an asbestos survey is required for

buildings constructed prior to 1980 in accordance with 29 CFR 1926.1101. An asbestos survey is also required, regardless of the construction date prior to renovation/demolition of the structure.

2.0 SCOPE OF SERVICES

As outlined in F&R proposal number 1954-00052, as revised on May 21, 2018, the survey included the following services with respect to possible future renovation and demolition:

- Identification and sampling, as necessary, of suspect ACMs.
- Testing, as necessary, of painted surface coatings for the presence of Lead.

For this survey, F&R sampled materials from the building interior, exterior, and the roof. F&R only sampled materials from those areas deemed safe to enter or access. Areas of the building deemed unsafe to enter included part of the northern most low level membrane roof that has fallen down into the building and the high level roof that, upon visual inspection, showed visible signs of damage to the membrane and rot to the sub-roof wooden sheathing. However, samples were able to be collected from both roofs; the fallen roof from within the building and the high level roof from a ladder.

F&R was also engaged to complete a Phase II ESA at the Property as part of F&R project number 54V-0288.

3.0 LIMITED ASBESTOS-CONTAINING MATERIALS SURVEY

F&R's Virginia Licensed Asbestos Building Inspectors, Braden Stocks (Virginia Asbestos License #3303004301) and Jason Cobb (Virginia Asbestos License #3303004305), conducted the Asbestos Survey of the current Property structure located at 2908 P Street on June 11, 12, and 25, 2018. The noted Inspectors were assisted by F&R employee Andrew Smith.

Federal Regulations (40 CFR Part 61, Subpart M – National Emission Standard for Asbestos (NESHAP)), as well as Virginia Department of Labor and Industry regulations require a thorough asbestos inspection of the structure to be conducted prior to the commencement of renovation and/or demolition activities. An ACM is defined by the Occupational Safety & Health Administration (OSHA) and the Environmental Protection Agency (EPA) as material containing greater than one percent (1%) asbestos.

3.1. Asbestos-Containing Materials (ACM) Methodology

This survey was conducted in general accordance with the Federal NESHAP and applicable State regulations for the presence of ACMs. The survey was characterized by a visual inspection and sampling of suspect building components at the subject property to be impacted by the proposed demolition activities.

Guidelines utilized in the asbestos survey were established by the EPA, ASTM International (ASTM), and The Environmental Information Association, Inc. (EIA). Utilized guidelines included: the Asbestos Hazard Emergency Response Act (40 CFR Part 763, Subpart E – Asbestos-Containing Materials in Schools (cited as AHERA)), ASTM Standard E2356-14 *Standard Practice for Comprehensive Building Asbestos Surveys*, and the EIA publication *Managing Asbestos in Buildings: A Guide for Owners and Managers – A Revision to the United States Environmental Protection Agency's 1985 document Guidance for Controlling Asbestos-Containing Materials in Buildings (EPA 560/5-85-024) Known as the Purple Book*.

F&R's aforementioned Industrial Hygienist(s) collected and submitted suspect asbestos-containing bulk samples to the laboratory, of which, a total of one hundred and six (106) suspect asbestos-containing bulk samples with discernable layers were analyzed. Due to multiple layers, a total of two hundred and sixteen (216) samples were analyzed.

Samples of suspect ACMs were organized as per the AHERA concept of Homogeneous Area (HA), collected, and transported to the Environmental Hazards Services, L.L.C. (EHS) testing laboratory. EHS is a National Institute for Standards and Technology (NIST) NVLAP accredited laboratory (NVLAP Lab Code: 101882-0) and Virginia licensed asbestos laboratory, in Richmond, Virginia, for analysis by Polarized Light Microscopy (PLM) following EPA Method 600/R-93/116 and 600/M4-082-020. Refer to Appendix A for Laboratory Certificates of Accreditations. Refer to Appendix D for Laboratory Certificates of Analysis and Bulk Sample Chain of Custody Forms for further description of sampled materials/analytical results.

3.2. Asbestos-Containing Materials Findings

The following material types were identified, sampled, and accordingly homogenized based upon similar construction discovered during bulk sampling:

- Floor Materials
- Joint Compound
- Ceiling Tiles
- Fibrous Roofing Materials
- Drywall
- Mastics – Various Applications
- Caulking/Sealants – Various Applications
- Plaster – With Skim Coat
- Silver Paints
- Roof Tars

The following table presents a summary of survey results from sampling events performed on June 11, 12, and 25, 2018. Refer to Appendix B for illustration of the locations of collected bulk samples. Samples containing detectable concentrations of asbestos are in **BOLD** type.

SUSPECT ASBESTOS-CONTAINING MATERIALS SAMPLE INFORMATION

HA #	Sample #	Sample Location(s)	Material Description	Laboratory Description	Result (Percent ACM)
1	1A 1B 1C	2nd Floor Dance Hall Ceiling	1' X 1' White Peghole Ceiling Tile	Brown Fibrous; White Paint-Like; Inhomogeneous	NAD[1]
2	2A	2nd Floor Dance Hall Ceiling	1' X 1' White Smooth-Textured Ceiling Tile 1	Beige Fibrous; Cream White Paint-Like; Inhomogeneous	NAD
	2B	2nd Floor Dance Hall Ceiling	1' X 1' White Smooth-Textured Ceiling Tile 1	Gray Fibrous; White Paint-Like; Inhomogeneous	NAD
	2C	2nd Floor Dance Hall Ceiling	1' X 1' White Smooth-Textured Ceiling Tile 1	Gray Fibrous; White Paint-Like; Inhomogeneous	NAD
			Joint Compound (Present on top of CT)	White Brittle; Homogeneous	NAD
3	3A	2nd Floor Dance Hall Wall	Red/White Plaster Wall Base Coat	Gray Granular; Homogeneous	NAD
			Skim Coat	White Brittle; Homogeneous	NAD
	3B	2nd Floor Dance Hall Wall	White Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD
			Joint Compound	White Granular; Cream Paint-Like; Inhomogeneous	NAD
		Upon analysis, this material was found to be part of Homogeneous Area (HA) 4 rather than HA 3; however, we have reported it here to reduce confusion. This sample appeared consistent with the plaster wall finishes during field sampling.			
	3C	2nd Floor Dance Hall Wall	White Plaster Wall Base Coat	Gray Granular; Homogeneous	NAD
			Skim Coat	White Brittle; Light Green Paint-Like; Inhomogeneous	NAD
4	4A 4B	2nd Floor Dance Hall Wall	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD
			Joint Compound I	White Granular; Homogeneous	NAD
			Joint Compound II	White Granular; Tan Fibrous; Inhomogeneous	NAD
	4C	2nd Floor Dance Hall Wall	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD
			Joint Compound	White Granular; Homogeneous	NAD
5	5A	2nd Floor Dance Hall Wall	White Popcorn-Textured Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD

HA #	Sample #	Sample Location(s)	Material Description	Laboratory Description	Result (Percent ACM)
			White Popcorn Texture	Cream Granular; White Paint-Like; Inhomogeneous	NAD
	5B[2]	**2nd Floor Dance Hall Wall**	White Popcorn-Textured Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD
			Joint Compound	**Cream Granular; Tan Paint-Like; Inhomogeneous**	**2% Chrysotile**
			White Popcorn Texture	Cream Granular; White Paint-Like; Inhomogeneous	NAD
			Drywall and Joint Compound Composite	**White Chalky; Brown Fibrous; Cream Granular; Tan/White Paint-Like; Inhomogeneous**	**Trace <1% Chrysotile via PLM analysis** **(Trace <0.25% Chrysotile via 400 Point Count)**
	5C	2nd Floor Dance Hall Wall	White Popcorn-Textured Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD
			White Popcorn Texture	Cream Granular; White Paint-Like; Inhomogeneous	NAD
6	6A 6B 6C	2nd Floor Dance Hall Ceiling	1' X 1' Unpainted Peghole Ceiling Tile	Brown Fibrous; Homogeneous	NAD
			Associated Yellow & Brown Mastic	Brown Adhesive; Homogeneous	NAD
7	7A 7B 7C	2nd Floor Dance Hall Ceiling	1' X 1' White Popcorn-Textured Ceiling Tile	Brown Fibrous; Homogeneous	NAD
			White Popcorn-Like Texture	Tan Granular; White Paint-Like; Inhomogeneous	NAD
8	**8A** **8B**	**2nd Floor Dance Hall Stage Floor**	Dark Red Carpet	Red Fibrous; Homogeneous	NAD
			Underlayment	Black Foam; Homogeneous	NAD
			Associated Black Mastic	**Brown Adhesive; Homogeneous**	**3% Chrysotile**
9	9A	South Stairwell to 2nd Floor Dance Hall Stairwell Floor	Felt Layer Beneath Green & Yellow Mosaic-Patterned Vinyl Sheet Flooring (VSF) *Missing Vinyl Layer from Sample	Black Tar-Like; Fibrous; Inhomogeneous	NAD

HA #	Sample #	Sample Location(s)	Material Description	Laboratory Description	Result (Percent ACM)
			Silver Paint	Silver Paint; Homogeneous	NAD
			Associated Black Mastic	Brown Adhesive; Homogeneous	NAD
	9B	South Stairwell to 2nd Floor Dance Hall Floor	Green & Yellow Mosaic-Patterned VSF	Green Vinyl; Black Fibrous; Inhomogeneous	NAD
			Silver Paint	Silver Paint; Homogeneous	NAD
			Associated Black Mastic	Brown Adhesive; Homogeneous	NAD
	9C	South Stairwell to 2nd Floor Dance Hall Floor	Green & Yellow Mosaic-Patterned VSF	Green Vinyl; Black Fibrous; Inhomogeneous	NAD
			Silver Paint	Silver Paint; Homogeneous	NAD
10	10A 10B	2nd Floor Dance Hall	Yellow Mirror Backing on Metal Support Poles	Tan Vinyl; Homogeneous	NAD
11	11A 11B	2nd Floor Dance Hall Men's Bathroom Ceiling	2' X 4' White Pinhole and Fissure Lay-in Acoustic Ceiling Tile	Gray Fibrous; White Paint-Like; Inhomogeneous	NAD
12	12A 12B	2nd Floor Dance Hall Bar Countertop	Yellow VSF w/ Green & Purple Accents on the Bar Countertop	Yellow Vinyl; Brown Fibrous; Inhomogeneous	NAD
			Associated Brown Mastic	Brown Adhesive; Homogeneous	NAD
13	13A 13B	2nd Floor Dance Hall Women's Bathroom Ceiling	1' X 1' White Smooth-Textured Ceiling Tile	Gray Fibrous; White Paint-Like; Inhomogeneous	NAD
14	14A	2nd Floor Dance Hall North Stairwell Wall	White/Green Plaster Walls Base coat	Gray Granular; Homogeneous	NAD
			Skim coat	White Brittle; Green Paint-Like; Inhomogeneous	NAD
	14B 14C	2nd Floor Dance Hall Walls	Base Coat I	Gray Granular; Homogeneous	NAD
			Skim Coat I	White Brittle; Homogeneous	NAD
			Base Coat II	Brown Granular; Homogeneous	NAD
			Skim Coat II	Gray Brittle; Homogeneous	NAD
15	15A 15B 15C	2nd Floor Dance Hall Ceiling over Bar Area	White Swirled-Textured Drywall Ceiling	Gray Chalky; Brown Fibrous; Inhomogeneous	NAD

HA #	Sample #	Sample Location(s)	Material Description	Laboratory Description	Result (Percent ACM)
			White Swirly Texture	Cream Granular; White Paint-Like; Inhomogeneous	NAD
16	16A 16B	2nd Floor Dance Hall Walls	Dark Gray/Green Drywall	White Chalky; Brown Fibrous; Green Paint-Like; Inhomogeneous	NAD
17	17A	1st Floor Wall (2908 P Street Dry Cleaners Section)	Gray Painted Concrete/Plaster Wall Base Coat	Brown Granular; Homogeneous	NAD
			Skim Coat	White Granular; Green Paint-Like; Inhomogeneous	NAD
	17B	1st Floor Wall (2908 P Street Dry Cleaners Section)	Gray Painted Concrete/Plaster Wall Base Coat	Brown Granular; Homogeneous	NAD
			Skim Coat	White Granular; Homogeneous	NAD
	17C	1st Floor Wall (2908 P Street Dry Cleaners Section)	Gray Painted Concrete/Plaster Wall Base Coat	Brown Granular; Homogeneous	NAD
			Skim Coat	White Granular; Green Paint-Like; Inhomogeneous	NAD
18	18A	1st Floor Wall (2908 P Street Dry Cleaners Section)	White Drywall Wall	White Chalky; Brown Fibrous; Inhomogeneous	NAD
	18B	1st Floor Wall (2908 P Street Dry Cleaners Section)	White Drywall Wall	White Chalky; Brown Fibrous; Inhomogeneous	NAD
			Fiberboard Backing	Brown Fibrous; White Paint-Like Inhomogeneous	NAD
	18C	1st Floor Wall (2908 P Street Dry Cleaners Section)	White Drywall Wall	White Chalky; Brown Fibrous; Inhomogeneous	NAD
			Fiberboard Backing	Brown Fibrous; White Paint-Like Inhomogeneous	NAD
			Insulation Material	Gray Fibrous; Homogeneous	NAD
HA # 19 was not included in the laboratory analysis					
20	20A	1st Floor Wall (Building Section with Kitchen)	Joint Compound	White Chalky; White Paint-Like; Inhomogeneous	NAD
			Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD
	20B 20C	1st Floor Wall (Building Section with Kitchen)	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD

HA #	Sample #	Sample Location(s)	Material Description	Laboratory Description	Result (Percent ACM)
21	21A 21B 21C	1st Floor Ceiling (Building Section with Kitchen)	14" X 14" Pink/White Smooth-Textured Ceiling Tile	White Chalky; Brown Fibrous; Inhomogeneous	NAD
			Associated Brown Daub Mastic	Brown Adhesive; Homogeneous	NAD
22	22A 22B	1st Floor Flooring (Building Section with Kitchen – Back Room)	Reddish-Orange Carpet w/ Yellow Accents	Orange Fibrous; Homogeneous	NAD
			Associated Yellow Mastic	Yellow Adhesive; Homogeneous	NAD
			Black Felt Layer	Black Fibrous; Fibrous	NAD
23	23A 23B 23C	1st Floor Ceiling (Building Section with Kitchen)	1' X 1' White Smooth-Textured Ceiling Tile	Gray/White Fibrous; Inhomogeneous	NAD
24	24A 24B	1st Floor Flooring (Building Section with Kitchen – Bathroom Area)	Yellow VSF w/ Brown Pattern Accent Lines	Gold Vinyl; White Foam; Inhomogeneous	NAD
25	25A 25B	1st Floor Ceiling (Building Section with Kitchen – Kitchen Area)	White Multi-Layered Plaster/DW Ceiling Base Coat	Brown Granular; Homogeneous	NAD
			Skim Coat	White Granular; Homogeneous	NAD
			Drywall Layer	White Chalky; Brown Fibrous; Inhomogeneous	NAD
26	**26A 26B**	**1st Floor Flooring (Building Section) with Kitchen – Bathroom Area)**	**Green VFT Tile Layer**	**Green Vinyl; Homogeneous**	**3% Chrysotile**
			Associated Black Mastic	Black Adhesive; Homogeneous	NAD
27	**27A 27B**	**1st Floor Flooring (Building Section with Kitchen – Bathroom Area)**	**Tile**	**Tan/Green Vinyl; Homogeneous**	**3% Chrysotile**
			Associated Black Mastic	Black Adhesive; Homogeneous	NAD
28	**28A 28B**	**1st Floor Flooring (Building Section with Kitchen – Bathroom Area)**	**Tile**	**Tan Vinyl; Homogeneous**	**3% Chrysotile**
			Associated Mastic	**Black Adhesive; Homogeneous**	**5% Chrysotile**

HA #	Sample #	Sample Location(s)	Material Description	Laboratory Description	Result (Percent ACM)
29	29A 29B	1st Floor Flooring (Building Section with Kitchen)	Grout	Beige Granular; Homogeneous	NAD
			Tile	**Green Vinyl; Homogeneous**	**3% Chrysotile**
			Associated Black Mastic	Black Adhesive; Homogeneous	NAD
30	30A	1st Floor Flooring (Building Section with Kitchen – Bathroom Area)	VSF I Layer	Gray Vinyl; Black Fibrous; Inhomogeneous	NAD
			Brick-Looking VSF II Layer	**Red Vinyl; Tan Fibrous; Inhomogeneous**	**20% Chrysotile**
			Associated Black Mastic (Under VSF II)	**Black Adhesive; Homogeneous**	**8% Chrysotile**
	30B	1st Floor Flooring (Building Section with Kitchen – Bathroom Area)	VSF I Layer	Gray Vinyl; Black Fibrous; Inhomogeneous	NAD
			Associated Black Mastic (Under VSF I)	**Black Adhesive; Homogeneous**	**8% Chrysotile**
			Brick-Looking VSFII Layer	**Red Vinyl; Tan Fibrous; Inhomogeneous**	**20% Chrysotile**
			Associated Black Mastic (Under VSF II)	**Black Adhesive; Homogeneous**	**8% Chrysotile**
31	31A 31B	1st Floor Flooring (Building Section with Kitchen – Bathroom Area)	**Brown Spanish-Tile-Looking VSF**	**Brown Vinyl-Like; Gray Fibrous; Inhomogeneous**	**18% Chrysotile**
32	32A 32B	1st Floor Interior Window Frame	White Brittle Window Glazing (Painted Pink)	Pink Paint-Like; Cream Soft Brittle; Inhomogeneous	NAD
33	33A 33B 33C	1st Floor Wall	Skim and Paint Layer Over Concrete Wall	Green Paint-Like; White Brittle; Inhomogeneous	NAD
34	34A	1st Floor Wall	Drywall	Brown Fibrous; Gray Chalky; Inhomogeneous	NAD
			Basecoat	Brown Granular; Homogeneous	NAD
			Skim Coat	Light Gray Brittle; Homogeneous	NAD
	34B 34C	1st Floor Wall	Basecoat	Brown Fibrous; Brown Granular; Inhomogeneous	NAD

HA #	Sample #	Sample Location(s)	Material Description	Laboratory Description	Result (Percent ACM)
			Skim Coat	Light Gray Brittle; Homogeneous	NAD
35	35A 35B	1st Floor Wall	Drywall	Brown Fibrous; Gray Chalky; Inhomogeneous	NAD
			Base Coat	Brown Granular; Homogeneous	NAD
			Skim Coat	Green Paint-Like; White Brittle; Inhomogeneous	NAD
36	36A	1st Floor Wall	Green Multi-Layered Plaster/DW Wall Drywall Layer	Brown Fibrous; Gray Chalky; Inhomogeneous	NAD
			Base Coat	Brown Granular; Homogeneous	NAD
			Skim Coat	Green Paint-Like; White Brittle; Inhomogeneous	NAD
37	37A 37B 37C	1st Floor Ceiling	Light-Gray Multi-Layered Drywall Plaster/DW Ceiling Drywall Layer	Brown Fibrous; White Chalky; Inhomogeneous	NAD
			Base Coat	Brown Granular; Homogeneous	NAD
			Skim Coat	Green Paint-Like; White Brittle; Inhomogeneous	NAD
38	38A 38B	East Exterior Wall Window	White Caulk Around Exterior Window	White Rubbery; Homogeneous	NAD
39	**39A 39B**	**Vertical Electrical Conduit on East Exterior Wall**	Beige & Black Sealant Around electrical conduit pipes	Beige Brittle; Homogeneous	NAD
			Black Tar Layer	**Black Tar-Like; Homogeneous**	**5% Chrysotile**
40	**40A 40B 40C**	**1007 N. 29th Street Roof Exhaust Vent**	**Black Fibrous Exhaust Vent Tar I**	**Black Brittle Tar-Like; Homogeneous**	**Trace <1% Chrysotile**
			Black Felt Layer	Black Tar-Like; Black Fibrous; Inhomogeneous	NAD
			Black Fibrous Exhaust Vent Tar II	**Black Pliable Tar; Homogeneous**	**4% Chrysotile**

HA #	Sample #	Sample Location(s)	Material Description	Laboratory Description	Result (Percent ACM)
41	41A	Northeast Low Roof (Collapsed – 1007 N. 29th Street)	Black Roofing Tar	Gray Aggregate; Black Tar-Like; Inhomogeneous	NAD
			Associated Brown Insulation	Brown Fibrous; Homogeneous	NAD
	41B	Northeast Low Roof (Collapsed – 1007 N. 29th Street)	Black Roofing Tar	Gray Aggregate; Black Tar-Like; Inhomogeneous	NAD
			Associated Brown Insulation	Brown Fibrous/White; Inhomogeneous	NAD
42	**42A**	**Southwest Low Roof (2908 P Street)**	**Roof Core Tar Layer**	**Black Tar; Homogeneous**	**Trace <1% Chrysotile**
			Felt Layer	**Black Fibrous; Homogeneous**	**32% Chrysotile**
			Insulation Layer	Brown Fibrous; Homogeneous	NAD
43	**43A 43B**	**Southwest Low Roof Parapet Wall (2908 P Street)**	**Black Roof Parapet Wall Sealant**	**Black Tar; Homogeneous**	**2% Chrysotile**
			Gray Roof Parapet Wall Sealant	**Gray Pliable Sealant; Homogeneous**	**12% Chrysotile**
44	**44A 44B**	**Southwest Low Roof (2908 P Street)**	**Black Tar Debris**	**Black Tar; Homogeneous**	**6% Chrysotile**
			Silver Paint	**Silver Paint; Homogeneous**	**3% Chrysotile**
45	**45A 45B**	**High Roof**	**Black Tar Roofing Membrane Layer**	**Black Tar; Homogeneous**	**3% Chrysotile**
			Silver Paint	**Silver Paint; Homogeneous**	**2% Chrysotile**

[1]NAD: No Asbestos Detected

[2]**Bold**: Asbestos Containing Material or Trace (<1%) Asbestos Present

3.3. Asbestos-Containing Materials Inventory

F&R conducted a survey of the reasonably and safely accessible portions of the building. The roof and some of the 1st Floor areas in the northern portion of the building (scheduled to be demolished) were excluded from sampling due to structural integrity concerns.

The following table presents identified materials containing greater than 1% asbestos, as well as, presumed materials with regard to F&R survey activities. Estimated quantities of the ACMs identified are provided for use in development of budgetary estimates for demolition and may

not accurately represent all materials present. Photographic documentation of ACMs for reference is provided as Appendix F.

ASBESTOS-CONTAINING MATERIALS INVENTORY

HA #	Material Location(s)	Material Description	Result (Percent ACM)
5[1]	2nd Floor Dance Hall Wall	Joint Compound	2% Chrysotile (Composite with Gypsum board is <0.25% Chrysotile via 400 Point Count)
8	2nd Floor Dance Hall Stage Floor	Black Mastic Under Red Carpet	3% Chrysotile
26	1st Floor Flooring (Building Section) with Kitchen – Bathroom Area)	Green VFT Tile	3% Chrysotile
27	1st Floor Flooring (Building Section with Kitchen – Bathroom Area)	Tan/Green Tile	3% Chrysotile
28	1st Floor Flooring (Building Section with Kitchen – Bathroom Area)	Tan VFT and Black Mastic	3%-5% Chrysotile
29	1st Floor Flooring (Building Section with Kitchen – Main Area)	Green VFT	3% Chrysotile
30[2]	1st Floor Flooring (Building Section with Kitchen – Bathroom Area)	2nd Layer of Red Brick Pattern Sheet Vinyl Flooring & Black Mastic (Under 1st Layer of Sheet Vinyl Flooring)	8%-20% Chrysotile
31	1st Floor Flooring (Building Section with Kitchen – Bathroom Area)	Brown Spanish-Tile-Looking VSF	18% Chrysotile
39[3]	Vertical Electrical Conduit on East Exterior Wall	Black Tar	5% Chrysotile
40[3]	1007 N. 29th Street Roof Exhaust Vent	Black Fibrous Exhaust Vent Tar	<1% - 4% Chrysotile
42[4]	Southwest Low Roof (2908 P Street)	Roof Core Tar Layer & Felt Layer	<1%-32% Chrysotile
43[3]	Southwest Low Roof (2908 P Street)	Black Roof Parapet Wall Sealant & Gray Roof Parapet Wall Sealant	2%-12% Chrysotile
44[3]	Southwest Low Roof (2908 P Street)	Black Tar Debris & Silver Paint	3%-6% Chrysotile
45[5]	High Roof	Black Tar Roofing Membrane Layer & Silver Paint	2%-3% Chrysotile

[1] HA 5: The 2nd Floor Dance Floor gypsum board walls were covered in a popcorn type surfacing material which did not test positive for asbestos. Only one out of three samples collected contained a joint compound layer which is positive for asbestos. When the drywall and joint compound were analyzed as a composite the amount of asbestos

detected was below 1% chrysotile. F&R does not consider the textured surfacing material to be an ACM; however, the joint compound located at nail holes and seams should be considered ACM.

[2] HA 30: The red brick pattern sheet vinyl flooring and black mastic under the top layer of sheet vinyl flooring tested positive for asbestos in both samples of HA #30. However, in the second sample of HA #30 the black mastic associated with the top layer of sheet vinyl flooring was found to contain asbestos as well. Therefore, all black mastic associated with the top layer of sheet vinyl flooring should be presumed to contain asbestos until otherwise tested. For removal purposes, it is prudent to treat the multilayered floor where mastics and one layer of flooring is ACM as if the entire multilayered floor is ACM.

[3] HA 39, 43, and 44: All black tar-like materials from the roof and exterior electrical conduit pipe coatings should be presumed as asbestos-containing.

[4] HA 42: The roof core sample had two layers that contained asbestos: the tar layer and felt layer. Therefore, the entire roof system of the southwest low roof should be treated as asbestos containing material.

[5] HA 45: There is a single roofing membrane layer on the high level roof which also contains a layer of silver paint; both layers contain asbestos. As such, the entire roofing system on the high level roof should be treated as asbestos containing material.

F&R presumes that, where materials have been documented to be ACMs and where those materials are similar to other materials which have not been found to be positive, those similar materials will be considered to be ACMs (i.e. where one material was analyzed and found to be positive, it is prudent to consider other similar materials positive, despite potential analytical data to the contrary).

However, note that several areas of black mastic were identified associated with specific flooring materials that are not-ACM. Only some black mastics, as noted above should be considered ACM unless evidence of homogeneity between confirmed positive ACM and documented negative mastics are observed in the field.

3.3.1. Trace Asbestos

Asbestos (Trace <1%) was detected in the sample of Black Tar sampled from the exterior roof vents (HA #40), and within the tar layer of the roof core (HA #42). Although this concentration of asbestos is below the regulatory threshold under EPA regulations, OSHA has regulations for the removal and disturbance of trace levels of asbestos. While trace concentrations of asbestos were identified in specific roofing layers, other associated roofing layers in the same Homogenous Area were found to be ACM; consequently, all roofing layers which cannot be reasonable segregated should be treated as ACM.

3.3.2. Asbestos in Sheet Vinyl Flooring

While the above listed Sheet Vinyl Flooring and associated mastic ACMs are classified as non-friable while installed, removal from the underlying substrate without disturbance of the fibrous

backing and mastic cannot be performed without rendering it friable; therefore, to be disturbed portions of the material should be treated as friable for abatement purposes.

3.3.3. Wallboard System Discussion

EPA NESHAP regulations indicate that "wallboard systems" where joint compound is used only at the joints and nail holes may be represented by a composite sample (walls which include other layers such as skim coat are not exempted from a requirement to conduct discrete sampling of each layer). Conversely, for wallboard systems with surfacing material, NESHAP regulations require individual samples of the drywall and joint compound and prohibit compositing of the wall system.

For this survey, F&R collected individual samples of both the drywall and joint compound; this individual sampling approach was performed in response to OSHA guidelines for worker exposure. Analysis of the three wallboard system samples (5A, 5B, and 5C) collected from the second floor dance hall walls included surface texturing in each sample and one instance of joint compound sample (5B); results indicated that the drywall and surface texture tested negative for asbestos, while the joint compound contained asbestos at a concentration of 2%. Based on visual evidence, it is likely that the joint compound layer which tested positive for asbestos (present in sample 5B) is only present at the joint seams and nail holes and, therefore, does not represent a surfacing material for this textured wallboard system (HA 5). Due to the difficulty in identifying nail holes and seams in the field, only a single sample of the joint compound was identified in the samples collected from walls in this area.

The laboratory was requested to analyze one sample where asbestos was identified (5B) as a composite comprising both joint compound and drywall. The PLM results of the composite sample indicated that the sample composite was <1% Chrysotile. The composite sample was then subjected to a more stringent and lower detection limit point count analytical method and found to be <0.25% Chrysotile. Note that sample layers which were subjected to composite sampling were not collected utilizing the NESHAP methodology specific to composite sampling; however, they were sampled in the field and consequently represent an approximately one to one ratio. This sampling method may not represent the current joint compound to wallboard ratio; however, samples collected with a representative ratio would be further diluted by the non-asbestos-containing wallboard and therefore the overall concentration of asbestos would be further reduced.

Because OSHA requirements still consider each wallboard system component separately, work which impacts the wallboard system would still be considered Class II Work and subject to those regulations. Based on the composite result indicating that the overall concentration of asbestos in the wallboard system is less than 1%, the material may be able to be disposed of as non-asbestos containing. However, best practices dictate that the wallboard system be treated as ACM during impact and disposal.

However, a January 21, 1999 letter from Clarence H. Wheeling, Ph. D., Occupational Health Compliance Director, for the Virginia Department of Labor and Industry, indicates that, if asbestos is present in a "wallboard system" at concentrations of less than 1% AND the building is being demolished by heavy equipment (by caving in the structure and disposing of the pieces *without* mechanical compaction) and provided that, during demolition, "the structure is sprayed with water to reduce dust," then Mr. Wheeling states that it is his "opinion that the project would not be covered under the asbestos standard,1926.1101." Consequently, an OSHA compliant analysis (separate layers analyzed discretely) would not be required.

Consequently, if the building is demolished, the wallboard system may not require abatement as asbestos if the building is disposed of appropriately and acceptable methods are followed. This historical interpretation should be confirmed in order to better understand current regulatory requirements.

3.3.4. Presumed Asbestos-Containing Materials

During the conduct of this survey, sampling was limited to those materials which were within the areas designated by the client, which were safely accessible, and which were able to be sampled without damaging systems or structures. As such, some materials should be presumed to be positive, unless sampling is conducted and shown to be negative. Such presumed asbestos containing materials (PACMS) include, but are not limited to:

- Electrical panel backing/arc deflectors/spark arresters,
- Roofing materials not sampled due to safety concerns,
- Cementitious pipes or panels,
- HVAC duct vibration cloth,

Note that asbestos was used in over 3,000 known products and was used extensively in construction materials including in insulation and finish materials such as drywall-based systems, acoustical tiles, caulks and mastics, vinyl-based materials, and specialty products. Asbestos also continues to be used in new construction because, as stated by the EPA, "the manufacture, importation, processing, and distribution in commerce of [various] products […] are not banned."

3.4. Asbestos-Containing Materials Recommendations

As detailed above, numerous materials were identified as asbestos-containing, utilized in various instances through the structure. Prior to renovation and/or demolition activities, F&R recommends that the identified ACMs be appropriately removed, handled, and disposed of by an appropriately licensed/accredited Abatement Contractor utilizing appropriately licensed/accredited personnel.

F&R further recommends that a third party Asbestos Professional be retained to provide on-site surveillance and guidance of the Asbestos Abatement Contractor to confirm complete and proper removal/disposal of ACMs in accordance with applicable federal, state, and local regulations. This recommendation is made as a best practice to reduce potential exposure to workers and limit liability.

Regarding the popcorn-textured drywall associated with HA 5, it is likely that the joint compound layer which tested positive for asbestos (present in sample 5B) is only present at the joint seams and nail holes and, therefore, does not represent a surfacing material for this textured wallboard system. This determination is based on visual evidence of a joint seam present at the location where sample 5B was collected; visual evidence of either joint seams or the presence of nail heads was not apparent in the vicinity of the sample 5A and 5C locations. Supplemental sampling from this wallboard system prior to abatement to confirm that the joint compound is, in fact, only associated with the joint seams and nail holes and is not being used as a surfacing material is prudent. If demolition is planned and the client does not plan abatement of the wallboard, F&R recommends consultation with DOLI and VOSH to confirm requirements prior to developing specifications or work plans.

The Client should note that F&R has encountered instances in which materials were analyzed by Polarized Light Microscopy (PLM) (following EPA Method 600/R-93/116) for the presence of asbestos with a result of "None Detected", but when analyzed by Transmission Electron Microscopy (TEM) for Non-friable Organically Bound (NOB) bulk material, analytical results have indicated that asbestos is present in quantities greater than 1%. The client should be aware that F&R has samples analyzed by the PLM method for a number of reasons (including financial and time considerations) and that this method is considered acceptable in Virginia; however some firms employ the more stringent TEM method which is required in some states. Therefore, it is possible that some materials identified as containing no asbestos within this report may, if subjected to a more stringent analytical method, reveal the presence of asbestos at concentrations of 1% or greater.

In addition, it should be noted that through NESHAP Applicability Determinations, friable asbestos bulk samples analyzed via PLM which indicate a result of asbestos content to be less than ten (10) percent, including trace amounts (<1%), the material in question shall either be assumed to be an ACM or further analyzed via PLM Point Count or TEM to verify asbestos content. Results obtained via PLM Point Count or TEM analysis shall supersede previous results obtained by standard PLM analysis. However, for a sample set, all samples must be point counted to rebut the material as ACM. Samples with analytical results via PLM which indicate that no asbestos was detected are not required to be further analyzed via PLM Point Count or TEM.

Should additional suspect ACMs be discovered during renovation and/or demolition activities that have not been sampled and will be disturbed, F&R recommends the work be temporarily

halted. Samples of suspect materials should be collected, analyzed, and handled accordingly prior to the resumption of renovation and/or demolition activities.

3.5. Applicable Regulations

3.5.1. EPA/NESHAP Regulations for Asbestos-Containing Materials

The U.S. Environmental Protection Agency promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR Part 61], which addresses the application, removal, and disposal of asbestos-containing materials (ACM). Under NESHAP the following categories are defined for asbestos-containing materials:

Friable - When dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

Non-friable - When dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Category I Non-friable ACM - Packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than 1% asbestos.

Category II Non-friable ACM – Material, excluding Category I Non-friable ACM, which contains more than 1% asbestos.

Regulated Asbestos Containing Material (RACM) – One of the following:

1. Friable ACM
2. Category I Non-friable ACM that has become friable.
3. Category I Non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading.
4. Category II Non-friable ACM that has a high probability of becoming, or has become, friable by the forces expected to act on the material in the course of demolition or renovation operations.

Under NESHAP, the following actions are required:

1. Prior to the commencement of demolition or renovation activities, the building owner must inspect the affected facility or part of the facility where the demolition or renovation activities will occur for the presence of asbestos.

2. Remove RACM from the facility before activities begin that would break up, dislodge, or similarly disturb the material or preclude access for subsequent removal.

3. RACM need not be removed if:

a) It is Category I non-friable ACM that is not in poor condition.
b) It is on a facility component that is encased in concrete or other similar material and is adequately wet whenever exposed.
c) It was not accessible for testing and was therefore not discovered until after demolition began and because of the demolition the material cannot be safely removed.
d) It is Category II non-friable ACM and the probability is low that the material will become crumbled, pulverized, or reduced to powder during demolition.

3.5.2. Virginia Asbestos Hazard Management Program

The Virginia Department of Labor and Industry (DOLI) regulates asbestos through enforcement of the Virginia Occupational Safety and Health (VOSH) regulations, enforcement of the Environmental Protection Agency's National Emission Standards for Hazardous Air Pollutants (NESHAP), and enforcement of the Asbestos Notification regulations found in the Labor Laws of Virginia (§40.1-51.20). Agency locations and regulations can be found on the agency Web site http://www.doli.virginia.gov.

The Virginia Department of Professional and Occupational Regulation (DPOR) is responsible for company and individual licensure in Virginia. Licensure and regulatory information can be found on DPOR's Web site http://www.dpor.virginia.gov/

The Virginia Department of Environmental Quality (DEQ) is responsible for the regulation of landfills in Virginia. Information on the disposal of asbestos in Virginia landfills can be obtained from the DEQ Web site http://www.deq.state.va.us/.

3.5.3. OSHA Asbestos Regulations

The Occupational Safety and Health Administration (OSHA) regulates employee exposure to asbestos under 29 CFR 1926.1101 and 29 CFR 1910.1001. Work associated with known or suspect ACMs must be conducted according to these regulations in addition to the noted EPA regulations.

4.0 LIMITED LEAD-BASED PAINT SCREENING

F&R conducted a limited survey of the current structure for Lead-Based Paint (LBP) and other coatings. The purpose of the Limited Survey is to identify LBP that may require appropriate removal, handling, and disposal procedures prior to scheduled renovation and/selective demolition activities at the subject property. Based on the nature of this survey, when one

component tests positive for the presence of lead paint all similar painted components must be assumed to be positive, unless additional testing is performed.

4.1. Lead-Based Paint (LBP) Survey Methodology

The survey was conducted in general accordance with EPA's work practice standards for conducting LBP activities (40 CFR 745.227), and the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (Second Edition, July 2012); however, this was not a comprehensive surface-by-surface investigation for LBP, but rather a screening survey of major coated surfaces where the presence of LBP is suspected.

4.1.1. XRF Testing

Sampling of surface coatings was conducted utilizing a Niton XLp-300 X-Ray Fluorescence (XRF) Lead Paint Analyzer (Serial Number 96955). Only accessible painted, coated, and/or varnished surfaces were tested using the XRF.

The XRF contains a small radioisotopic source and operates on the principle of x-ray fluorescence, whereby lead atoms in a surface coating are stimulated to emit characteristic x-rays, which are then detected by the instrument. Levels of lead are reported in units of milligrams per square centimeter (mg/cm^2). The XRF can measure surface or non-surface concentrations of lead with 95% accuracy at the HUD action level of 1.0 mg/cm^2. The XRF is able to accurately detect a concentration as low as 0.1 mg/cm^2 of lead. The XRF classifies coated surfaces as "positive", "negative", or "null" for lead content based on the action level (1.0 mg/cm^2) and the performance characteristics of the XRF. The XRF was checked for calibration before and after the survey. The calibration was checked against a standard reference material (1.04 mg/cm^2 NIST Standard) supplied by the XRF manufacturer. A copy of the XRF Performance Characteristic sheet is included as an attachment to this report.

Positive: Lead is present at or above the action level of 1.0 mg/cm^2 on *one or more* of the components tested.

Negative: Lead is not present at or above the action level of 1.0 mg/cm^2 on any of the components tested.

Null: Insufficient data was collected by the XRF during the sample time to determine if the surface is positive or negative (i.e. – premature removal or instrument slippage, terminating the test).

4.2. XRF Survey Results

A total of sixty-two (62) XRF readings, excluding calibration readings, were collected from the interior and exterior of the building. Twelve (12) of the readings collected at the Project site were positive for LBP when compared to the action level of 1.0 mg/cm². Refer to Appendix F, XRF Data Table for a listing of the readings and respective information as well as an explanation of the data table and the Performance Characteristic Sheet. The following table presents the positive readings collected.

XRF READINGS FOR LEAD-BASED PAINT

Reading Number	Component	Substrate	Color	Room	Floor
002	Support Column	Metal	Red	2nd Floor Dance Hall	Second
004	Window	Wood	Pink	2nd Floor Dance Hall	Second
009	Support Column	Metal	White	2nd Floor Dance Hall	Second
012	Ceiling	Metal	White	Stairwell	Second
015	Ceiling	Metal	White	Stairwell	Second
020	Wall	Brick	Black	NW Facing	Exterior
029	Wall	Brick	Gray	South Wall - Exterior	Exterior
030	Wall	Brick	Pink	South Wall - Exterior	Exterior
031	Wall	Brick	Orange	South Wall - Exterior	Exterior
032	Wall	Brick	Blue	South Wall - Exterior	Exterior
045	Wall	Plaster	Blue	Kitchen Section – Bar Area	First
063	Ceiling	Metal	Yellow	Dry Cleaners Section	First
064	Ceiling	Metal	Orange	Dry Cleaners Section	First
067	Ceiling	Metal	Blue/Yellow	2nd Floor Dance Hall	Second

4.2.1. Locations of Detected Lead-Based Paint

Based on the detection of LBP on specific component types and our observation of an apparent homogenous painting history, the following building components should be considered to be coated with LBP:

LEAD-BASED PAINT MATERIALS INVENTORY

Material Description	Color	Substrate	Material Location(s)
Interior			
Metal Support Column	Red, White	Metal	Throughout
Window	Pink	Wood	Second Floor
Ceiling	White, Yellow, Orange, Blue	Metal	Throughout
Exterior			
Brick	Gray, Pink, Orange, Blue	Brick	Exterior Walls

The above table details only those building materials with painted and/or coated surfaces with a reported lead concentration greater than or equal to 1.0 mg/cm^2. However, readings of the majority of painted or coated surfaces indicated a lead content between 0.1 mg/cm^2 and 0.9 mg/cm^2.

4.3. Lead-Based Paint Conclusions & Recommendations

This survey concludes that building components located on both the exterior and interior of the structure contain lead-based paint/coatings. Photographic documentation of select lead-containing paint/coatings on building materials is presented in Appendix E: Section 2.

F&R recommends that activities which may disturb such coatings be conducted following appropriate Federal and State regulations. Federal regulations with regard to worker safety and disposal requirements are summarized in the following Section – Applicable Regulations; this is not an exhaustive list.

4.4. Applicable Regulations

4.4.1. OSHA Regulations for Lead-Based Paint

While the majority of materials tested at the site were negative for lead based paint and/or surface coatings, other painted and/or coated surfaces or materials containing lead may contain sufficient concentrations of lead, which when disturbed, may generate lead dust greater than the "Action Level" concentration of 30 micrograms per cubic meter (µg/m^3) or greater than the

"Permissible Exposure Limit" of 50 micrograms per cubic meter established by the OSHA "Lead Exposure in Construction Rule" (29 CFR 1926.62). The OSHA standard does not define acceptable levels of lead in paint at which no exposure to airborne lead (above the action level) would be expected; however, guidance is available for work practices which present the highest risk for lead exposure to workers. Rather, OSHA defines airborne concentrations and references specific types of work practices and operations from which a lead hazard may be generated (reference 29 CFR 1926.62, section d). Environmental and personnel monitoring should be conducted during removal or demolition processes (as applicable) to determine actual personal exposure. This monitoring information can be used to determine the levels of personnel protection and environmental controls required for work involving specific removal/demolition processes on specific structures. Under OSHA requirements, the Contractor performing the work will be required to conduct this monitoring. It is important to note that environmental controls will vary dependent upon the content of lead in paint, the process used to remove it, duration of the work, and the amount of paint to be removed.

F&R recommends that workers disturbing painted (or coated) surfaces as part of this project receive OSHA Lead in Construction Awareness training and that engineering controls and hygiene practices described in 29 CFR 1926.62 be followed during the disturbance of painted (or coated) surfaces.

4.4.2. EPA Regulations for Lead-Based Paint

For disposal of construction/demolition debris that has LBP, testing may be required as specified by the Environmental Protection Agency (EPA) for lead content to determine proper disposal. EPA regulations require that a generator of waste determine if that waste is hazardous by performing testing in accordance with the requirements of 40 CFR 261.11 or for wastes that may be RCRA hazardous (such as items with high lead content), the generator may assume that the waste is hazardous and comply with the hazardous waste regulation. The need for determination of disposal may be additionally subject to the disposal and/or recycling facility utilized.

5.0 LIMITATIONS

This report has been prepared for the exclusive use the City of Richmond Economic & Community Development and/or their agents. This service was performed in accordance with generally accepted environmental practices. No other warranty, expressed or implied, is made. Conclusions and recommendations are based, in part, upon information provided to us by others and site observations. We have not verified the completeness or accuracy of the information provided by others, unless otherwise noted. Observations and recommendations are based upon conditions readily visible at the site at the time of the site visit, and upon current industry standards.

During this study, suspect asbestos samples were submitted for analysis at a NVLAP-accredited laboratory via polarized light microscopy; suspect LBP was field characterized using industry standard methods and practices. Inaccessible areas, such as behind solid ceilings or behind solid walls were not surveyed; therefore, some target materials may not have been identified. As with similar surveys of this nature, actual conditions exist only at the precise locations from which samples were collected or tested. Areas inspected were limited to those designated by the scope of services by the Client. Certain inferences are based on the results of this sampling and related testing to form a professional opinion of conditions in areas beyond those from which the samples were collected. Visual evaluation of other materials of concern conducted comprised a cursory visual review of the building materials and, to a limited extent, contents of the facility. It is also understood that this is a non-invasive survey so that it is possible that concealed materials may be present that were not accessible during the original survey. No other warranty, expressed or implied, is made. Reasonable effort was made by inspection personnel to locate and sample suspect materials within the structure with regard to the scope of services. However, for a facility, the existence of unique or concealed ACMs and debris is a possibility. F&R does not warrant, guarantee or profess to have the ability to locate or identify all ACMs or other chemicals of concern in a facility.

Under this scope of services, F&R assumes no responsibility regarding response actions (e.g. O&M Plans, Encapsulation, Abatement, Removal, Tenant Notification, etc.) initiated as a result of these findings. F&R assumes no liability for the duties and responsibilities of the Client with respect to compliance with appropriate regulations. Compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements and should be performed by appropriately qualified and licensed/accredited personnel, as warranted.

Froehling & Robertson, Inc. by virtue of providing the services described in this report, does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to local, state, or federal public agencies conditions at the site that may present a potential danger to public health, safety, or the environment. The Client agrees to notify the appropriate local, state, or federal public agencies as required by law, or otherwise to disclose, in a timely manner, information that may be necessary to prevent danger to public health, safety, or the environment. The contents of the report should not be construed in any way as a recommendation to purchase, sell, or develop the project site. F&R retains the right to revise this report if new information is later discovered or made available. The report must be presented in its entirety.

Appendix A

F&R Personnel and Laboratory Accreditations

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
08-31-2018

NUMBER
3303004301

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS INSPECTOR LICENSE

BRADEN TYLER STOCKS
3015 DUMBARTON ROAD
RICHMOND, VA 23228

DPOR

Status can be verified at http://www.dpor.virginia.gov

Jay W. DeBoer, Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS INSPECTOR LICENSE
NUMBER: 3303004301 EXPIRES: 08-31-2018

BRADEN TYLER STOCKS
3015 DUMBARTON ROAD
RICHMOND, VA 23228

(FOLD)

Status can be verified at http://www.dpor.virginia.gov

DPOR-PC (02/2017)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
09-30-2018

NUMBER
3303004305

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS INSPECTOR LICENSE

JASON ANTHONY COBB
13407 PHARLAP TURN
MIDLOTHIAN, VA 23112

DPOR

Status can be verified at http://www.dpor.virginia.gov

Jay W. DeBoer Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101882-0

Environmental Hazards Services, L.L.C.

N. Chesterfield, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2018-01-01 through 2018-12-31

Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Laboratory Accreditation Program

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Environmental Hazards Services, L.L.C.
7469 Whitepine Road
N. Chesterfield, VA 23237-2261
Ms. Julie Dickerson
Phone: 804-275-4788 Fax: 804-275-4907
Email: jdickerson@leadlab.com
http://www.leadlab.com

ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 101882-0

Bulk Asbestos Analysis

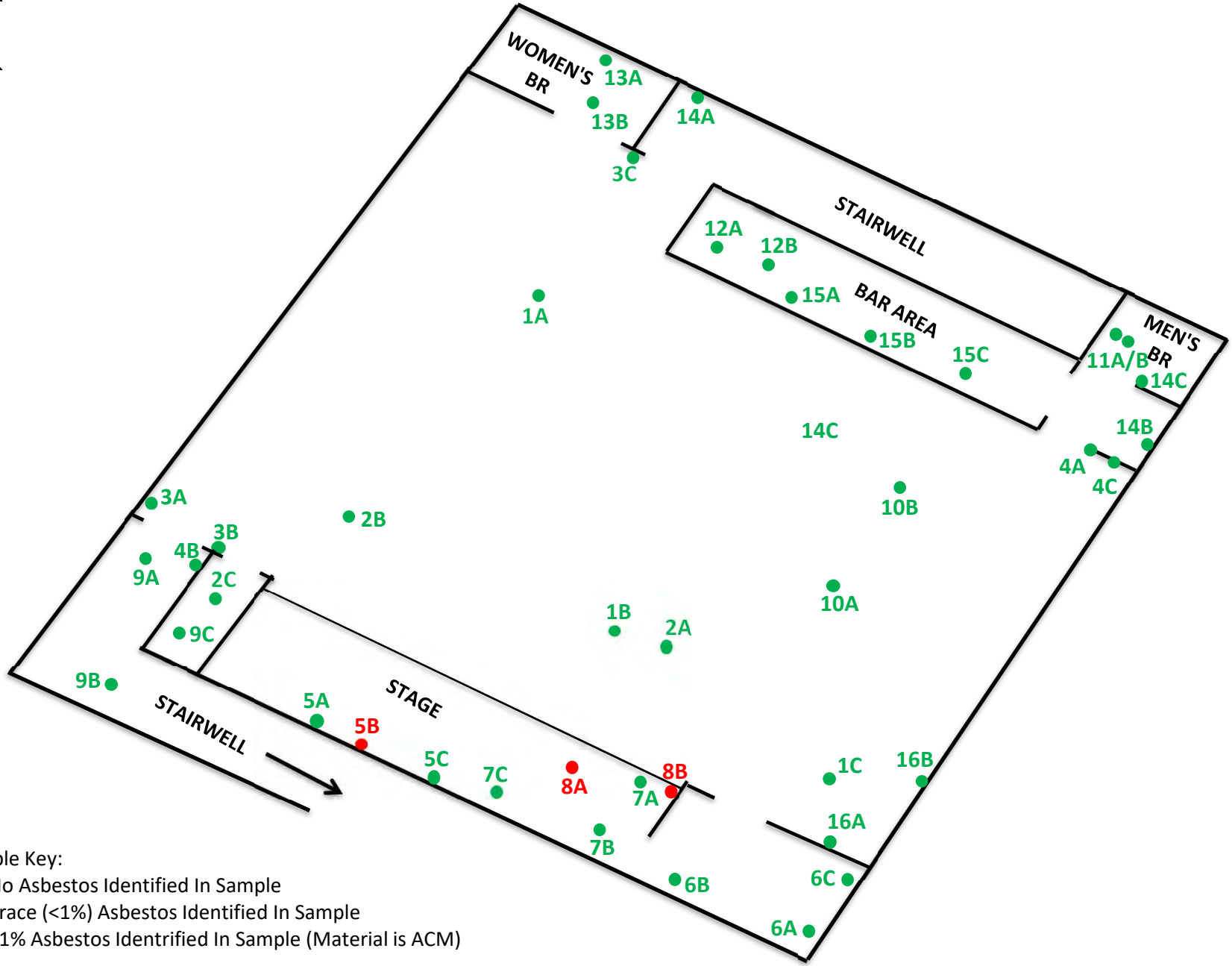
Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

Effective 2018-01-01 through 2018-12-31

Appendix B

! ăōŜăűƶă Sample Diagrams



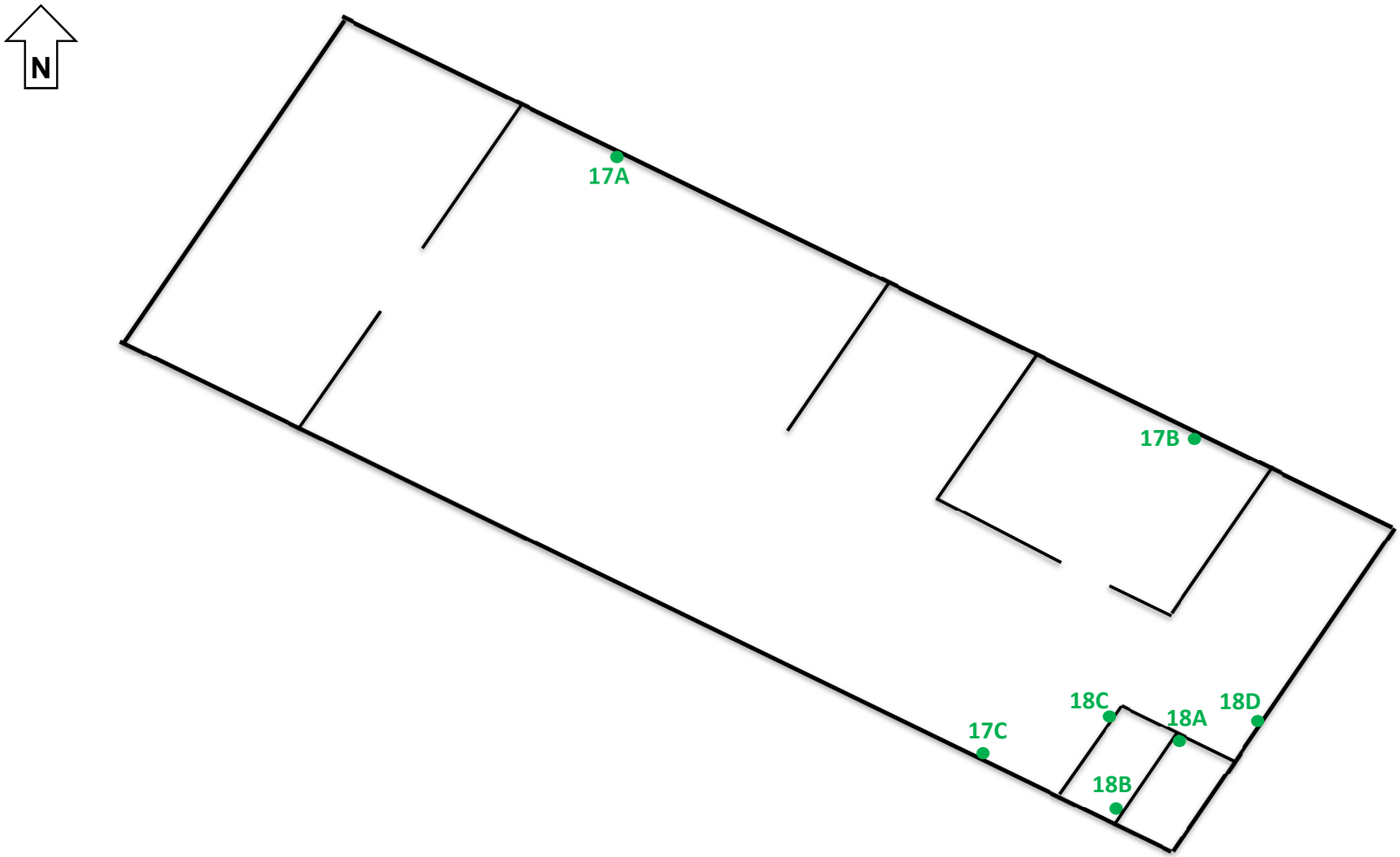
Sample Key:

- ● = No Asbestos Identified In Sample
- ● = Trace (<1%) Asbestos Identified In Sample
- ● = >1% Asbestos Identrified In Sample (Material is ACM)

Froehling & Robertson, Inc.
Engineering • Environmental • Geotechnical
3015 Dumbarton Road Richmond, Virginia 23228-5831 I USA
T 804.264.2701 I F 804.266.1275

2nd Floor Dance Hall Sample Diagram
The Railroad Club
2908 P Street
Richmond, Virginia

Project No.:	54V-0288	Scale:	NTS
Date:	18-Jul-18	Drawn:	BTS
Drawing No.:	1	Checked:	JAC



Sample Key:
- ● = No Asbestos Identified In Sample
- ● = Trace (<1%) Asbestos Identified In Sample
- ● = >1% Asbestos Identrified In Sample (Material is ACM)

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Dry Cleaning Space Sample Diagram
The Railroad Club
2908 P Street
Richmond, Virginia

Project No.:	54V-0288	Scale:	NTS
Date:	25-Jul-18	Drawn:	BTS
Drawing No.:	1	Checked:	JAC

Sample Key:
- ● = No Asbestos Identified In Sample
- ● = Trace (<1%) Asbestos Identified In Sample
- ● = >1% Asbestos Identrified In Sample (Material is ACM)

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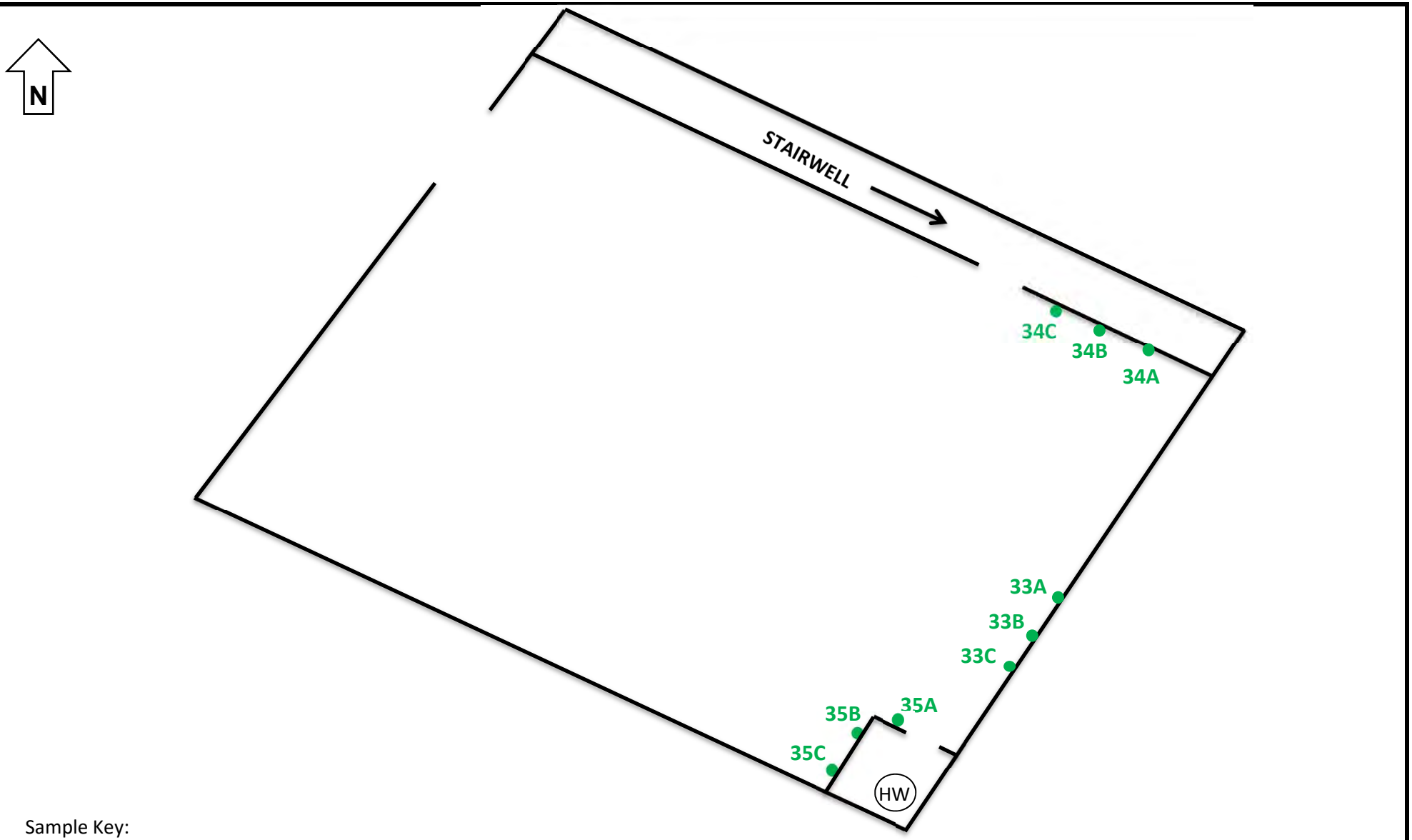
1st Floor Kitchen Space Sample Diagram
The Railroad Club
2908 P Street
Richmond, Virginia

Project No.:	54V-0288	Scale:	NTS
Date:	25-Jul-18	Drawn:	BTS
Drawing No.:	1	Checked:	JAC



Sample Key:

- ● = No Asbestos Identified In Sample
- ● = Trace (<1%) Asbestos Identified In Sample
- ● = >1% Asbestos Identrified In Sample (Material is ACM)

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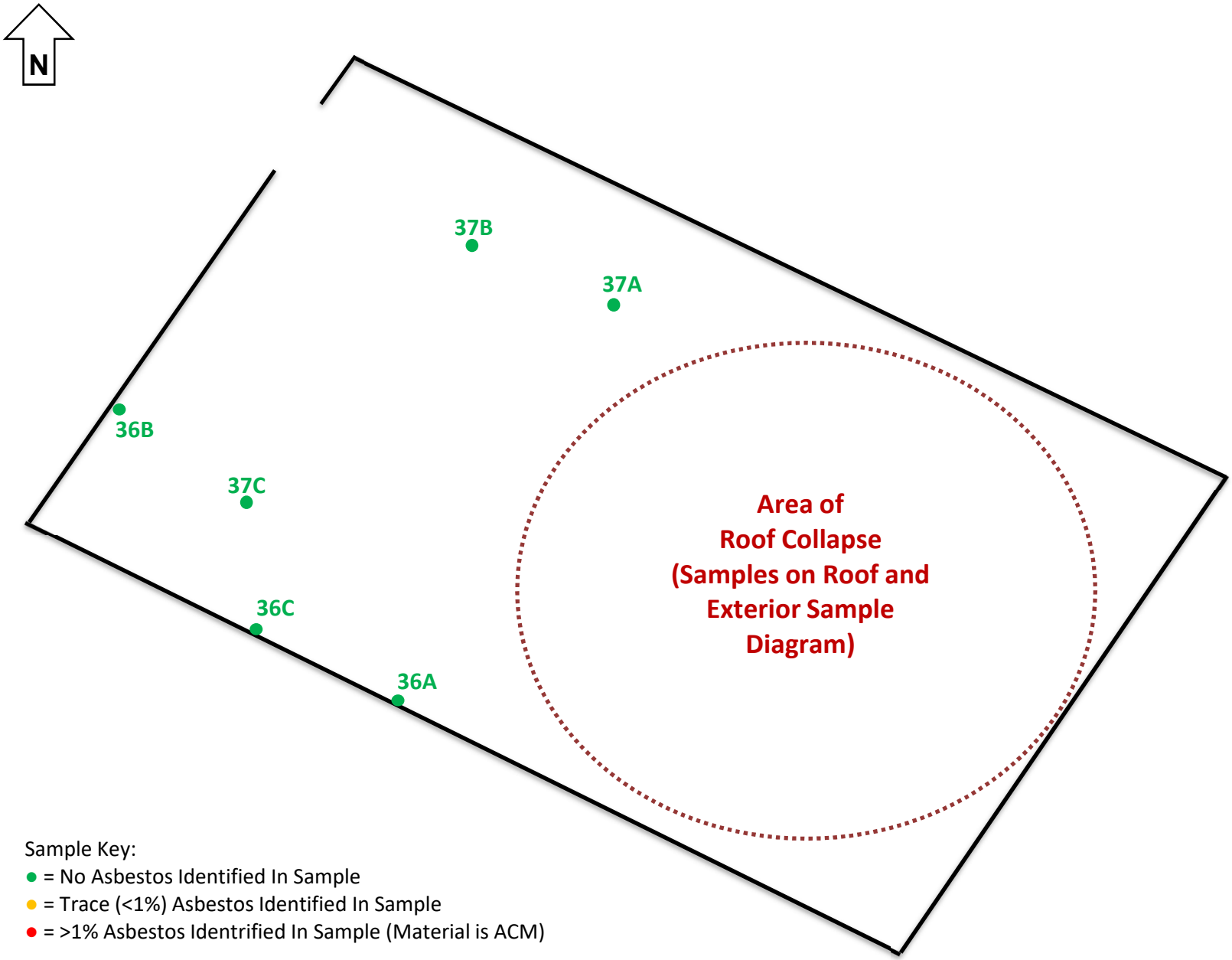
1st Floor Open Space Sample Diagram
The Railroad Club
2908 P Street
Richmond, Virginia

Project No.:	54V-0288	Scale:	NTS
Date:	25-Jul-18	Drawn:	BTS
Drawing No.:	1	Checked:	JAC



Sample Key:

- ● = No Asbestos Identified In Sample
- ● = Trace (<1%) Asbestos Identified In Sample
- ● = >1% Asbestos Identrified In Sample (Material is ACM)

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3015 Dumbarton Road Richmond, Virginia 23228-5831 I USA
T 804.264.2701 I F 804.266.1275

1st Floor Open Space Sample Diagram
The Railroad Club
2908 P Street
Richmond, Virginia

Project No.:	54V-0288	Scale:	NTS
Date:	25-Jul-18	Drawn:	BTS
Drawing No.:	1	Checked:	JAC

Sample Key:
- ● = No Asbestos Identified In Sample
- ● = Trace (<1%) Asbestos Identified In Sample
- ● = >1% Asbestos Identrified In Sample (Material is ACM)

Froehling & Robertson, Inc.
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T 804.264.2701 I F 804.266.1275

Roof and Exterior Sample Diagram
The Railroad Club
2908 P Street
Richmond, Virginia

Project No.:	54V-0288	Scale:	NTS
Date:	25-Jul-18	Drawn:	BTS
Drawing No.:	1	Checked:	JAC

Appendix C

Laboratory Certificates of Accreditations
Bulk Sample Chain of Custody Forms

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

Asbestos Bulk Analysis Report

Report Number: 18-06-01680

Client: Froehling & Robertson - Richmond
3015 Dumbarton Road
Richmond, VA 23228

Received Date: 06/13/2018
Analyzed Date: 06/14/2018, 06/15/2018
Reported Date: 06/18/2018

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Client Number: 48-2016

Fax Number: 804-266-1275

Laboratory Results

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-001	1A		Brown Fibrous; White Paint-Like; Inhomogeneous	NAD	85% Cellulose 15% Non-Fibrous
18-06-01680-002	1B		Brown Fibrous; White Paint-Like; Inhomogeneous	NAD	85% Cellulose 15% Non-Fibrous
18-06-01680-003	1C		Brown Fibrous; White Paint-Like; Inhomogeneous	NAD	85% Cellulose 15% Non-Fibrous
18-06-01680-004	2A		Beige Fibrous; Cream White Paint-Like; Inhomogeneous	NAD	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-005	2B		Gray Fibrous; White Paint-Like; Inhomogeneous	NAD	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous
18-06-01680-006A	2C	Ceiling Tile	Gray Fibrous; White Paint-Like; Inhomogeneous	NAD	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous
18-06-01680-006B	2C	Joint Comp.	White Brittle; Homogeneous	NAD	100% Non-Fibrous
Present on the top of ceiling tile.					
18-06-01680-007A	3A	Base Coat	Gray Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous
18-06-01680-007B	3A	Skim Coat	White Brittle; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-008A	3B	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 80% Non-Fibrous
18-06-01680-008B	3B	Joint Comp.	White Granular; Cream Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-009A	3C	Base Coat	Gray Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-009B	3C	Skim Coat	White Brittle; Light Green Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-010A	4A	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 80% Non-Fibrous
18-06-01680-010B	4A	Other *	White Granular; Homogeneous	NAD	100% Non-Fibrous
*Joint Compound I					
18-06-01680-010C	4A	Other *	White Granular; Tan Fibrous; Inhomogeneous	NAD	35% Cellulose 65% Non-Fibrous
*Joint Compound II					
18-06-01680-011A	4B	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 80% Non-Fibrous
18-06-01680-011B	4B	Other *	White Granular; Homogeneous	NAD	100% Non-Fibrous
*Joint Compound I					
18-06-01680-011C	4B	Other *	White Granular; Tan Fibrous; Inhomogeneous	NAD	30% Cellulose 70% Non-Fibrous
*Joint Compound II					
18-06-01680-012A	4C	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 80% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-012B	4C	Joint Comp.	White Granular; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-013A	5A	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 80% Non-Fibrous
18-06-01680-013B	5A	Texture	Cream Granular; White Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-014A	5B	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 80% Non-Fibrous
18-06-01680-014B	5B	Joint Comp.	Cream Granular; Tan Paint-Like; Inhomogeneous	2% Chrysotile	98% Non-Fibrous
			Total Asbestos:	2%	
Chrysotile present in cream granular material.					
18-06-01680-014C	5B	Texture	Cream Granular; White Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-014D	5B	Other *	White Chalky; Brown Fibrous; Cream Granular; Tan/White Paint-Like; Inhomogeneous	Trace <1% Chrysotile	20% Cellulose 80% Non-Fibrous
			Total Asbestos:	Trace <1%	

*Composite

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-015A	5C	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 80% Non-Fibrous
18-06-01680-015B	5C	Texture	Cream Granular; White Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-016A	6A	Ceiling Tile	Brown Fibrous; Homogeneous	NAD	95% Cellulose 5% Non-Fibrous
18-06-01680-016B	6A	Mastic	Brown Adhesive; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-017A	6B	Ceiling Tile	Brown Fibrous; Homogeneous	NAD	95% Cellulose 5% Non-Fibrous
18-06-01680-017B	6B	Mastic	Brown Adhesive; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-018A	6C	Ceiling Tile	Brown Fibrous; Homogeneous	NAD	95% Cellulose 5% Non-Fibrous
18-06-01680-018B	6C	Mastic	Brown Adhesive; Homogeneous	NAD	100% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-019A	7A	Ceiling Tile	Brown Fibrous; Homogeneous	NAD	95% Cellulose 5% Non-Fibrous
18-06-01680-019B	7A	Texture	Tan Granular; White Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-020A	7B	Ceiling Tile	Brown Fibrous; Homogeneous	NAD	95% Cellulose 5% Non-Fibrous
18-06-01680-020B	7B	Texture	Tan Granular; White Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-021A	7C	Ceiling Tile	Brown Fibrous; Homogeneous	NAD	95% Cellulose 5% Non-Fibrous
18-06-01680-021B	7C	Texture	Tan Granular; White Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-022A	8A	Carpet	Red Fibrous; Homogeneous	NAD	90% Synthetic 10% Non-Fibrous
18-06-01680-022B	8A	Underlay-ment	Black Foam; Homogeneous	NAD	100% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-022C	8A	Mastic	Brown Adhesive; Homogeneous	3% Chrysotile	97% Non-Fibrous
			Total Asbestos:	3%	
18-06-01680-023A	8B	Carpet	Red Fibrous; Homogeneous	NAD	90% Synthetic 10% Non-Fibrous
18-06-01680-023B	8B	Underlay-ment	Black Foam; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-023C	8B	Mastic	Brown Adhesive; Homogeneous	3% Chrysotile	97% Non-Fibrous
			Total Asbestos:	3%	
18-06-01680-024A	9A	Felt	Black Tar-Like; Fibrous; Inhomogeneous	NAD	65% Cellulose 35% Non-Fibrous
18-06-01680-024B	9A	Silver Paint	Silver Paint; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-024C	9A	Mastic	Brown Adhesive; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-025A	9B	Linoleum	Green Vinyl; Black Fibrous; Inhomogeneous	NAD	35% Cellulose 5% Synthetic 60% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-025B	9B	Silver Paint	Silver Paint; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-025C	9B	Mastic	Brown Adhesive; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-026A	9 C	Linoleum	Green Vinyl; Black Fibrous; Inhomogeneous	NAD	35% Cellulose 5% Synthetic 60% Non-Fibrous
18-06-01680-026B	9 C	Silver Paint	Silver Paint; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-027	10A		Tan Vinyl; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-028	10B		Tan Vinyl; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-029	11A		Gray Fibrous; White Paint-Like; Inhomogeneous	NAD	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous
18-06-01680-030	11B		Gray Fibrous; White Paint-Like; Inhomogeneous	NAD	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous

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Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-031A	12A	Formica	Yellow Vinyl; Brown Fibrous; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous
18-06-01680-031B	12A	Mastic	Brown Adhesive; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-032A	12B	Formica	Yellow Vinyl; Brown Fibrous; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous
18-06-01680-032B	12B	Mastic	Brown Adhesive; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-033	13A		Gray Fibrous; White Paint-Like; Inhomogeneous	NAD	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous
18-06-01680-034	13B		Gray Fibrous; White Paint-Like; Inhomogeneous	NAD	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous
18-06-01680-035A	14A	Base Coat	Gray Granular; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-035B	14A	Skim Coat	White Brittle; Green Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-036A	14B	Other *	Gray Granular; Homogeneous	NAD	100% Non-Fibrous
*Base Coat I					
18-06-01680-036B	14B	Other *	White Brittle; Homogeneous	NAD	100% Non-Fibrous
*Skim Coat I					
18-06-01680-036C	14B	Other *	Brown Granular; Homogeneous	NAD	100% Non-Fibrous
*Base Coat II					
18-06-01680-036D	14B	Other *	Gray Brittle; Homogeneous	NAD	100% Non-Fibrous
*Skim Coat II					
18-06-01680-037A	14C	Other *	Gray Granular; Homogeneous	NAD	100% Non-Fibrous
*Base Coat I					
18-06-01680-037B	14C	Other *	White Brittle; Homogeneous	NAD	100% Non-Fibrous
*Skim Coat I					
18-06-01680-037C	14C	Other *	Brown Granular; Homogeneous	NAD	100% Non-Fibrous
*Base Coat II					
18-06-01680-037D	14C	Other *	Gray Brittle; Homogeneous	NAD	100% Non-Fibrous
*Skim Coat II					

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Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-038A	15A	Drywall	Gray Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 80% Non-Fibrous
18-06-01680-038B	15A	Texture	Cream Granular; White Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-039A	15B	Drywall	Gray Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 80% Non-Fibrous
18-06-01680-039B	15B	Texture	Cream Granular; White Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-040A	15C	Drywall	Gray Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 80% Non-Fibrous
18-06-01680-040B	15C	Texture	Cream Granular; White Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-041	16A		White Chalky; Brown Fibrous; Green Paint-Like; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous

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Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-042	16B		White Chalky; Brown Fibrous; Green Paint-Like; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous
18-06-01680-043A	17A	Base Coat	Brown Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous
18-06-01680-043B	17A	Skim Coat	White Granular; Green Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-044A	17B	Base Coat	Brown Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous
18-06-01680-044B	17B	Skim Coat	White Granular; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-045A	17C	Base Coat	Brown Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous
18-06-01680-045B	17C	Skim Coat	White Granular; Green Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-046	18A		White Chalky; Brown Fibrous; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous

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Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-047A	18B	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous
18-06-01680-047B	18B	Other *	Brown Fibrous; White Paint-Like; Inhomogeneous	NAD	98% Cellulose 2% Non-Fibrous
*Fiberboard					
18-06-01680-048A	18C	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous
18-06-01680-048B	18C	Other *	Brown Fibrous; White Paint-Like; Inhomogeneous	NAD	98% Cellulose 2% Non-Fibrous
*Fiberboard					
18-06-01680-048C	18C	Other *	Gray Fibrous; Homogeneous	NAD	45% Cellulose 45% Synthetic 10% Non-Fibrous
*Insulation-Like Material					
18-06-01680-049A	20A	Joint Comp.	White Chalky; White Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-049B	20A	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-050	20B		White Chalky; Brown Fibrous; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous
18-06-01680-051	20C		White Chalky; Brown Fibrous; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous
18-06-01680-052A	21A	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous
18-06-01680-052B	21A	Mastic	Brown Adhesive; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous
18-06-01680-053A	21B	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous
18-06-01680-053B	21B	Mastic	Brown Adhesive; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous
18-06-01680-054A	21C	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous
18-06-01680-054B	21C	Mastic	Brown Adhesive; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-055A	22A	Carpet	Orange Fibrous; Homogeneous	NAD	95% Synthetic 5% Non-Fibrous
18-06-01680-055B	22A	Mastic	Yellow Adhesive; Homogeneous	NAD	4% Synthetic 96% Non-Fibrous
18-06-01680-055C	22A	Felt	Black Fibrous; Homogeneous	NAD	85% Cellulose 15% Non-Fibrous
18-06-01680-056A	22B	Carpet	Orange Fibrous; Homogeneous	NAD	95% Synthetic 5% Non-Fibrous
18-06-01680-056B	22B	Mastic	Yellow Adhesive; Homogeneous	NAD	4% Synthetic 96% Non-Fibrous
18-06-01680-056C	22B	Felt	Black Fibrous; Homogeneous	NAD	85% Cellulose 15% Non-Fibrous
18-06-01680-057	23A		Gray/White Fibrous; Inhomogeneous	NAD	55% Cellulose 35% Fibrous Glass 10% Non-Fibrous
18-06-01680-058	23B		Gray/White Fibrous; Inhomogeneous	NAD	55% Cellulose 35% Fibrous Glass 10% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-059	23C		Gray/White Fibrous; Inhomogeneous	NAD	55% Cellulose 35% Fibrous Glass 10% Non-Fibrous
18-06-01680-060	24A		Gold Vinyl; White Foam-Like; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-061	24B		Gold Vinyl; White Foam; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-062A	25A	Base Coat	Brown Granular; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous
18-06-01680-062B	25A	Skim Coat	White Granular; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-062C	25A	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous
18-06-01680-063A	25B	Base Coat	Brown Granular; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous
18-06-01680-063B	25B	Skim Coat	White Granular; Homogeneous	NAD	100% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-063C	25B	Drywall	White Chalky; Brown Fibrous; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous
18-06-01680-064A	26A	Tile	Green Vinyl; Homogeneous	3% Chrysotile	97% Non-Fibrous
			Total Asbestos:	3%	
18-06-01680-064B	26A	Mastic	Black Adhesive; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous
18-06-01680-065A	26B	Tile	Green Vinyl; Homogeneous	3% Chrysotile	97% Non-Fibrous
			Total Asbestos:	3%	
18-06-01680-065B	26B	Mastic	Black Adhesive; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous
18-06-01680-066A	27A	Tile	Tan/Green Vinyl; Homogeneous	3% Chrysotile	97% Non-Fibrous
			Total Asbestos:	3%	
18-06-01680-066B	27A	Mastic	Black Adhesive; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous
18-06-01680-067A	27B	Tile	Tan/Green Vinyl; Homogeneous	3% Chrysotile	97% Non-Fibrous
			Total Asbestos:	3%	

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Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-067B	27B	Mastic	Black Adhesive; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous
18-06-01680-068A	28A	Tile	Tan Vinyl; Homogeneous	3% Chrysotile	97% Non-Fibrous
			Total Asbestos:	3%	
18-06-01680-068B	28A	Mastic	Black Adhesive; Homogeneous	5% Chrysotile	95% Non-Fibrous
			Total Asbestos:	5%	
18-06-01680-069A	28B	Tile	Tan Vinyl; Homogeneous	3% Chrysotile	97% Non-Fibrous
			Total Asbestos:	3%	
18-06-01680-069B	28B	Mastic	Black Adhesive; Homogeneous	5% Chrysotile	95% Non-Fibrous
			Total Asbestos:	5%	
18-06-01680-070A	29A	Plaster	Beige Granular; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-070B	29A	Tile	Green Vinyl; Homogeneous	3% Chrysotile	97% Non-Fibrous
			Total Asbestos:	3%	
18-06-01680-070C	29A	Mastic	Black Adhesive; Homogeneous	NAD	1% Cellulose 99% Non-Fibrous

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Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-071A	29B	Plaster	Beige Granular; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-071B	29B	Tile	Green Vinyl; Homogeneous	3% Chrysotile	97% Non-Fibrous
			Total Asbestos:	3%	
18-06-01680-071C	29B	Mastic	Black Adhesive; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous
18-06-01680-072A	30A	Linoleum I	Gray Vinyl; Black Fibrous; Inhomogeneous	NAD	55% Cellulose 10% Synthetic 35% Non-Fibrous
18-06-01680-072B	30A	Linoleum II	Red Vinyl; Tan Fibrous; Inhomogeneous	20% Chrysotile	10% Cellulose 70% Non-Fibrous
			Total Asbestos:	20%	
Chrysotile present in fibrous backing					
18-06-01680-072C	30A	Other *	Black Adhesive; Homogeneous	8% Chrysotile	92% Non-Fibrous
			Total Asbestos:	8%	
*Mastic under linoleum II					
18-06-01680-073A	30B	Linoleum I	Gray Vinyl; Black Fibrous; Inhomogeneous	NAD	55% Cellulose 10% Synthetic 35% Non-Fibrous
18-06-01680-073B	30B	Other *	Black Adhesive; Homogeneous	8% Chrysotile	92% Non-Fibrous
			Total Asbestos:	8%	
*Mastic under linoleum I					

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-073C	30B	Linoleum II	Red Vinyl; Tan Fibrous; Inhomogeneous	20% Chrysotile	10% Cellulose 70% Non-Fibrous
			Total Asbestos:	20%	
Chrysotile present in fibrous backing					
18-06-01680-073D	30B	Other *	Black Adhesive; Homogeneous	8% Chrysotile	92% Non-Fibrous
			Total Asbestos:	8%	
*Mastic under linoleum II					
18-06-01680-074	31A		Brown Vinyl-Like; Gray Fibrous; Inhomogeneous	18% Chrysotile	5% Cellulose 77% Non-Fibrous
			Total Asbestos:	18%	
Chrysotile present in fibrous backing. No mastic present.					
18-06-01680-075	31B		Brown Vinyl-Like; Gray Fibrous; Inhomogeneous	18% Chrysotile	5% Cellulose 77% Non-Fibrous
			Total Asbestos:	18%	
Chrysotile present in fibrous backing. No mastic present.					
18-06-01680-076	32A		Pink Paint-Like; Cream Soft Brittle; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-077	32B		Pink Paint-Like; Cream Soft Brittle; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-078	33A		Green Paint-Like; White Brittle; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-079	33B		Green Paint-Like; White Brittle; Inhomogeneous	NAD	100% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-080	33C		Green Paint-Like; White Brittle; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-081A	34A	Drywall	Brown Fibrous; Gray Chalky; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous
18-06-01680-081B	34A	Base Coat	Brown Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous
18-06-01680-081C	34A	Skim Coat	Light Gray Brittle; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-082A	34B	Base Coat	Brown Fibrous; Brown Granular; Inhomogeneous	NAD	20% Cellulose 2% Hair 78% Non-Fibrous
18-06-01680-082B	34B	Skim Coat	Light Gray Brittle; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-083A	34C	Base Coat	Brown Fibrous; Brown Granular; Homogeneous	NAD	20% Cellulose 2% Hair 78% Non-Fibrous
18-06-01680-083B	34C	Skim Coat	Light Gray Brittle; Homogeneous	NAD	100% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-084A	35A	Drywall	Brown Fibrous; Gray Chalky; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous
18-06-01680-084B	35A	Base Coat	Brown Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous
18-06-01680-084C	35A	Skim Coat	Green Paint-Like; White Brittle; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-085A	35B	Drywall	Brown Fibrous; Gray Chalky; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous
18-06-01680-085B	35B	Base Coat	Brown Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous
18-06-01680-085C	35B	Skim Coat	Green Paint-Like; White Brittle; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-086A	36A	Drywall	Brown Fibrous; Gray Chalky; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous
18-06-01680-086B	36A	Base Coat	Brown Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-086C	36A	Skim Coat	Green Paint-Like; White Brittle; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-087A	36B	Drywall	Brown Fibrous; Brown Chalky; Inhomogeneous	NAD	25% Cellulose 75% Non-Fibrous
18-06-01680-087B	36B	Base Coat	Brown Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous
18-06-01680-087C	36B	Skim Coat	Gray Paint-Like; White Brittle; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-088A	37A	Drywall	Brown Fibrous; White Chalky; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous
18-06-01680-088B	37A	Base Coat	Brown Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous
18-06-01680-088C	37A	Skim Coat	Gray Paint-Like; White Brittle; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-089A	37B	Drywall	Brown Fibrous; White Chalky; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-089B	37B	Base Coat	Brown Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous
18-06-01680-089C	37B	Skim Coat	Gray Paint-Like; White Brittle; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-090A	37C	Drywall	Brown Fibrous; White Chalky; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous
18-06-01680-090B	37C	Base Coat	Brown Granular; Homogeneous	NAD	2% Hair 98% Non-Fibrous
18-06-01680-090C	37C	Skim Coat	Gray Paint-Like; White Brittle; Inhomogeneous	NAD	100% Non-Fibrous
18-06-01680-091	38A		White Rubbery; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-092	38B		White Rubbery; Homogeneous	NAD	100% Non-Fibrous
18-06-01680-093A	39A	Other *	Beige Brittle; Homogeneous	NAD	100% Non-Fibrous

*Beige Brittle Material

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-093B	39A	Tar	Black Tar-Like; Homogeneous	5% Chrysotile	95% Non-Fibrous
			Total Asbestos:	5%	
18-06-01680-094A	39B	Other *	Beige Brittle; Homogeneous	NAD	100% Non-Fibrous
*Beige Brittle Material					
18-06-01680-094B	39B	Tar	Black Tar-Like; Homogeneous	5% Chrysotile	95% Non-Fibrous
			Total Asbestos:	5%	
18-06-01680-095A	40A	Tar I	Black Brittle Tar-Like; Homogeneous	Trace <1% Chrysotile	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
Tar material on felt. Possible contamination from materials in the bag.					
18-06-01680-095B	40A	Felt	Black Tar-Like; Black Fibrous; Inhomogeneous	NAD	55% Fibrous Glass 45% Non-Fibrous
18-06-01680-095C	40A	Tar II	Black Pliable Tar; Homogeneous	4% Chrysotile	96% Non-Fibrous
			Total Asbestos:	4%	
18-06-01680-096A	40B	Tar I	Black Brittle; Homogeneous	Trace <1% Chrysotile	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
Tar on felt material. Possible contamination from materials in the bag.					
18-06-01680-096B	40B	Felt	Black Tar-Like; Black Fibrous; Inhomogeneous	NAD	55% Fibrous Glass 45% Non-Fibrous

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-01680-096C	40B	Tar II	Black Pliable; Homogeneous	4% Chrysotile	96% Non-Fibrous
			Total Asbestos:	4%	
18-06-01680-097A	40C	Tar I	Black Brittle Tar-Like; Homogeneous	Trace <1% Chrysotile	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
Tar on felt material. Possible contamination from materials in bag.					
18-06-01680-097B	40C	Felt	Black Tar-Like; Black Fibrous; Inhomogeneous	NAD	55% Fibrous Glass 45% Non-Fibrous
18-06-01680-097C	40C	Tar II	Black Pliable; Homogeneous	4% Chrysotile	96% Non-Fibrous
			Total Asbestos:	4%	
18-06-01680-098A	41A	Shingle	Gray Aggregate; Black Tar-Like; Inhomogeneous	NAD	25% Fibrous Glass 75% Non-Fibrous
18-06-01680-098B	41A	Insulation	Brown Fibrous; Homogeneous	NAD	99% Cellulose 1% Non-Fibrous
18-06-01680-099A	41B	Shingle	Gray Aggregate; Black Tar-Like; Inhomogeneous	NAD	25% Fibrous Glass 75% Non-Fibrous
18-06-01680-099B	41B	Insulation	Brown/White Fibrous; Inhomogeneous	NAD	99% Cellulose 1% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 48-2016 Report Number: 18-06-01680

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials

QC Sample: 23-M12010-4, 27-M12009-3, 28-M12010-2, 30-M22009-3

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

Method: EPA Method 600/R-93/116, EPA Method 600/M4-82-020

Analyst: Araceli Enzler, Kathy Fletcher, Keleigh King, Angel McDaniel

Reviewed By Authorized Signatory: Tasha Eaddy

Tasha Eaddy
QA/QC Clerk

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Each distinct component in an inhomogeneous sample was analyzed separately and reported as a composite. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C. California Certification #2319 NY ELAP #11714 NVLAP #101882-0 VELAP 460172. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), (for enhanced detection capabilities) for materials regulated by EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

400 Point Count Analysis, where noted, performed per EPA Method 600/R-93/116 with a Reporting Limit of 0.25%.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND: NAD = no asbestos detected

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Environmental Hazards Services, LLC

Asbestos Chain-of-Custody Form

SHIP TO: 7469 Whitepine Rd. Richmond, VA 23237
Phone: (800) 347-4010 FAX: (804) 275-4907
ONLINE CLIENT PORTAL AVAILABLE FOR ANALYSIS RESULTS AT:
www.leadlab.com

18-06-01680
Due Date:
06/18/2018
(Monday)
ER MC
99 PLM

Company Name: Froehling & Robertson Account Number:
Address: 3015 Dumbarton Road City/State/Zip: Richmond, VA 23228
Phone #(804) 380-7767 Email: bstocks@fandr.com Fax:

Project Name / Testing Address: The Railroad Club - 2908 P Street City/State (Required): Richmond, VA
Collected by: Braden Stocks P.O. # ~~STV 0288~~ DTS 54V0288-00007

TURN AROUND TIMES: IF NO TAT IS SPECIFIED, SAMPLE(S) WILL BE PROCESSED AND CHARGED AS 3 - DAY TAT. 54V0288-00007

1 Day | 2 Day | ✓ | (3 Day) | * Same Day – Must Call Ahead | * Weekend – Must Call Ahead

No.	Client Sample ID	HA Area #	Collection Date	Collection Time	PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	TEM - Bulk	Comments
1	1A, B, C		6/12/2018	(AM) / PM	X					
2	2A, B, C			AM / PM	X					
3	3A, B, C			AM / PM	X					
4	4A, B, C			AM / PM	X					
5	5A, B, C			AM / PM	X					
6	6A, B, C			AM / PM	X					
7	7A, B, C			AM / PM	X					
8	8A, B			AM / PM	X					
9	9A, B, C			AM / PM	X					
10	10A, B			AM / PM	X					

Released by: Braden Stocks Signature: Date/Time: 6/13/18 1100
Received by: SNicolle Signature: SNicolle Date/Time: 6/13/18 11:35a

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Environmental Hazards Services, LLC

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www.leadlab.com

1680

~For Lab Use Only~

Company Name: F&R Account Number:

Address: 3015 Dumbarton Rd City/State/Zip: Richmond, VA 23228

Phone #: (804) 380-7767 Email: bstocks@fandr.com Fax:

Project Name / Testing Address: The Railroad Club - 2908 P Street City/State (Required): Richmond, VA

Collected by: Braden Stocks P.O. # 54V0288-00007

TURN AROUND TIMES: IF NO TAT IS SPECIFIED, SAMPLE(S) WILL BE PROCESSED AND CHARGED AS 3 - DAY TAT.

1 Day	2 Day	✓	3 Day	* Same Day – Must Call Ahead	* Weekend – Must Call Ahead

No.	Client Sample ID	HA Area #	Collection Date	Collection Time	PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	TEM - Bulk	Comments
1	11A, B		6/12/18	AM / PM	✓					
2	12 A, B			AM / PM	✓					
3	13 A, B			AM / PM	✓					
4	14 A, B, C			AM / PM	✓					
5	15 A, B, C			AM / PM	✓					
6	16 A, B			AM / PM	✓					
7	17 A, B, C			AM / PM	✓					
8	18 A, B, C			AM / PM	✓					
9	20 A, B, C			AM / PM	✓					HA#19 Not included*
10	21 A, B, C			AM / PM	✓					

Released by: Braden Stocks	Signature:	Date/Time:	
Received by: SNicolle	Signature:	Date/Time: 6/13/18 1135	

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Company Name: F & R Account Number:

Address: 3015 Dumbarton Rd City/State/Zip: Richmond, VA 23228

Phone #: 804.380.7767 Email: bstocks@fandr.com Fax:

Project Name / Testing Address: The Railroad Club - 2908 P Street City/State (Required): Richmond, VA

Collected by: Braden Stocks P.O. # 54V0288-00007

TURN AROUND TIMES: IF NO TAT IS SPECIFIED, SAMPLE(S) WILL BE PROCESSED AND CHARGED AS 3 - DAY TAT.

1 Day	2 Day	✓ 3 Day	* Same Day – Must Call Ahead	* Weekend – Must Call Ahead

No.	Client Sample ID	HA Area #	Collection Date	Collection Time	PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	TEM - Bulk	Comments
1	22A, B		6/12/18	AM / PM	✓					
2	23A, B, C			AM / PM	✓					
3	24A, B			AM / PM	✓					
4	25A, B			AM / PM	✓					
5	26A, B			AM / PM	✓					
6	27A, B			AM / PM	✓					
7	28A, B			AM / PM	✓					
8	29A, B			AM / PM	✓					
9	30A, B			AM / PM	✓					
10	31A, B			AM / PM	✓					

Released by: Braden Stocks	Signature:	Date/Time:
Received by: S Nicolelli	Signature: S Nicolelli	Date/Time: 6/13/18 11:35

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Company Name: F&R Account Number:

Address: 3015 Dumbarton Rd City/State/Zip: Richmond, VA 23228

Phone #: 804.380.7767 Email: bstocks@fandr.com Fax:

Project Name / Testing Address: The Railroad Club - 2908 P Street City/State (Required): Richmond, VA

Collected by: Braden Stocks P.O. # 54V0288-00007

TURN AROUND TIMES: IF NO TAT IS SPECIFIED, SAMPLE(S) WILL BE PROCESSED AND CHARGED AS 3 - DAY TAT.

1 Day	2 Day	✓ 3 Day	* Same Day – Must Call Ahead	* Weekend – Must Call Ahead

No.	Client Sample ID	HA Area #	Collection Date	Collection Time	PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	TEM - Bulk	Comments
1	32A, B		6/12/18	AM / PM	✓					
2	33A, B, C			AM / PM	✓					
3	34A, B, C			AM / PM	✓					
4	35A, B			AM / PM	✓					
5	36A, B			AM / PM	✓					
6	37A, B, C			AM / PM	✓					
7	38A, B			AM / PM	✓					
8	39A, B			AM / PM	✓					
9	40A, B, C			AM / PM	✓					
10	41A, B			AM / PM	✓					

Released by: Braden Stocks	Signature:	Date/Time:
Received by: SW Icolella	Signature:	Date/Time: 6/13/18 1:35

Asbestos 400 Point Count Analysis Report

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237

Telephone: 800.347.4010

Report Number: 18-06-02382

Client: Froehling & Robertson - Richmond
3015 Dumbarton Road
Richmond, VA 23228

Received Date: 06/13/2018
Analyzed Date: 06/18/2018
Reported Date: 06/20/2018

Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA; EHS# 18-06-01680

Client Number:
48-2016

Laboratory Results

Fax Number:
804-266-1275

Lab Sample Number	Client Sample Number	Lab Gross Description	% Asbestos	Narrative ID
18-06-02382-001	5 B Composite	White Chalky; Brown Fibrous; Cream Granular; Tan/White Paint-Like	<0.25 % Chrysotile	A12

Sample Narratives:

A12: Chrysotile fibers observed but did not fall under any counted points.

Reporting Limit: 0.25 % Asbestos

Method: EPA Method 600/R-93/116, EPA Method 600/M4-82-020

Analyst: Araceli Enzler

Reviewed By Authorized Signatory:

Tasha Eaddy
QA/QC Clerk

LEGEND NAD = No Asbestos Detected

POINT COUNT REQUEST FORM

EHS Laboratories

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

18-06-02382

Due Date:
06/22/2018
(Friday)
ER MC

Received Date: 06/19/2018
Client #: 48-2016
Company Name: Froehling & Robertson - Richmond
Project/Test Address: 54V0288-00007; The Railroad Club; 2908 P Street; Richmond, VA; EHS# 18-06-01680
Analysis Requested: 400 PT CT.

Client Sample #	EHS Sample #	Sample Location and/or Comments
5B	18-06-01680.005	

Date Samples Received	Received By	Original Analyst	Date Analyzed	Date Request Received	Received By
6/13/18	Sue	Araceli	6/18/18	6/19/18	Tiffany

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Asbestos Chain-of-Custody Form

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www.leadlab.com

18-06-01680

Due Date:
06/18/2018
(Monday)
ER MC

99 PLM

Company Name: Froehling & Robertson Account Number:
Address: 3015 Dumbarton Road City/State/Zip: Richmond, VA 23228
Phone #(804) 380-7767 Email: bstocks@fandr.com Fax:

Project Name / Testing Address: The Railroad Club - 2908 P Street City/State (Required): Richmond, VA
Collected by: Braden Stocks P.O. # [redacted] DTS 54V0288-000

TURN AROUND TIMES: IF NO TAT IS SPECIFIED, SAMPLE(S) WILL BE PROCESSED AND CHARGED AS 3 - DAY TAT. 54V0288-00007

1 Day	2 Day	✓	(3 Day)	* Same Day – Must Call Ahead	* Weekend – Must Call Ahead

No.	Client Sample ID (Point Count)	HA Area #	Collection Date	Collection Time	PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	TEM - Bulk	Comments
1	1 A, B, C		6/12/2018	(AM) / PM	X					
2	2 A, B, C			AM / PM	X					
3	3 A, B, C			AM / PM	X					
4	4 A, B, C			AM / PM	X					
* 5	5 A (B) C			AM / PM	X					
6	6 A, B, C			AM / PM	X					
7	7 A, B, C			AM / PM	X					
8	8 A, B			AM / PM	X					
9	9 A, B, C			AM / PM	X					
10	10 A, B			AM / PM	X					

Released by: Braden Stocks Signature: Date/Time: 6/13/18 1100
Received by: SNicolle Signature: Date/Time: 6/13/18 11:35a

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

Asbestos Bulk Analysis Report

Report Number: 18-06-03446

Client: Froehling & Robertson - Richmond
3015 Dumbarton Road
Richmond, VA 23228

Received Date: 06/25/2018
Analyzed Date: 06/26/2018
Reported Date: 06/26/2018

Project/Test Address: The Railroad Club; 2908 P Street; Richmond, VA

Client Number: 48-2016

Fax Number: 804-266-1275

Laboratory Results

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-03446-001A	42A	Tar	Black Tar; Homogeneous	Trace <1% Chrysotile	5% Cellulose 15% Fibrous Glass 80% Non-Fibrous
			Total Asbestos:	Trace <1%	
18-06-03446-001B	42A	Felt	Black Fibrous; Homogeneous	32% Chrysotile	56% Cellulose 12% Non-Fibrous
			Total Asbestos:	32%	
18-06-03446-001C	42A	Insulation	Brown Fibrous; Homogeneous	NAD	95% Cellulose 5% Non-Fibrous
18-06-03446-002A	43A	Tar	Black Tar; Homogeneous	2% Chrysotile	3% Cellulose 95% Non-Fibrous
			Total Asbestos:	2%	
18-06-03446-002B	43A	Sealant	Gray Pliable Sealant; Homogeneous	12% Chrysotile	1% Cellulose 87% Non-Fibrous
			Total Asbestos:	12%	

Environmental Hazards Services, L.L.C

Client Number: 48-2016 Report Number: 18-06-03446

Project/Test Address: The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-03446-003A	43B	Tar	Black Tar; Homogeneous	2% Chrysotile	3% Cellulose 95% Non-Fibrous
			Total Asbestos:	2%	
18-06-03446-003B	43B	Sealant	Gray Pliable Sealant; Homogeneous	12% Chrysotile	1% Cellulose 87% Non-Fibrous
			Total Asbestos:	12%	
18-06-03446-004A	44A	Tar	Black Tar; Homogeneous	6% Chrysotile	2% Cellulose 92% Non-Fibrous
			Total Asbestos:	6%	
18-06-03446-004B	44A	Silver Paint	Silver Paint; Homogeneous	3% Chrysotile	1% Cellulose 96% Non-Fibrous
			Total Asbestos:	3%	
18-06-03446-005A	44B	Tar	Black Tar; Homogeneous	6% Chrysotile	2% Cellulose 92% Non-Fibrous
			Total Asbestos:	6%	
18-06-03446-005B	44B	Silver Paint	Silver Paint; Homogeneous	3% Chrysotile	1% Cellulose 96% Non-Fibrous
			Total Asbestos:	3%	
18-06-03446-006A	45A	Tar	Black Tar; Homogeneous	3% Chrysotile	1% Cellulose 23% Synthetic 73% Non-Fibrous
			Total Asbestos:	3%	
18-06-03446-006B	45A	Silver Paint	Silver Paint; Homogeneous	2% Chrysotile	1% Cellulose 97% Non-Fibrous
			Total Asbestos:	2%	

Environmental Hazards Services, L.L.C

Client Number: 48-2016 Report Number: 18-06-03446

Project/Test Address: The Railroad Club; 2908 P Street; Richmond, VA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
18-06-03446-007A	45B	Tar	Black Tar; Homogeneous	3% Chrysotile	1% Cellulose 23% Synthetic 73% Non-Fibrous
			Total Asbestos:	3%	
18-06-03446-007B	45B	Silver Paint	Silver Paint; Homogeneous	2% Chrysotile	1% Cellulose 97% Non-Fibrous
			Total Asbestos:	2%	

QC Sample: 30-M22009-3

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

Method: EPA Method 600/R-93/116, EPA Method 600/M4-82-020

Analyst: Christian H. Schaible

Reviewed By Authorized Signatory: Tasha Eaddy

Tasha Eaddy
QA/QC Clerk

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Each distinct component in an inhomogeneous sample was analyzed separately and reported as a composite. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C. California Certification #2319 NY ELAP #11714 NVLAP #101882-0 VELAP 460172. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), (for enhanced detection capabilities) for materials regulated by EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

400 Point Count Analysis, where noted, performed per EPA Method 600/R-93/116 with a Reporting Limit of 0.25%.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND: NAD = no asbestos detected

EHS Laboratories™
Environmental Hazards Services, LLC

Asbestos Chain-of-Custody Form

SHIP TO: 7469 Whitepine Rd. Richmond, VA 23237
Phone: (800) 347-4010 FAX: (804) 275-4907
ONLINE CLIENT PORTAL AVAILABLE FOR ANALYSIS RESULTS AT:
www.leadlab.com

18-06-03446

Due Date:
06/26/2018
(Tuesday)
ER MC

4 PLM

Company Name: Froehling & Robertson Account Number:
Address: 3015 Dumbarton Road City/State/Zip: Richmond, VA 23228
Phone #: (804) 380-7767 Email: bstocks@fandr.com Fax:

Project Name / Testing Address: The Railroad Club – 2908 P Street City/State (Required): Richmond VA
Collected by: Braden Stocks / Jason Cobb P.O. # [redacted] 54V0288-

TURN AROUND TIMES: IF NO TAT IS SPECIFIED, SAMPLE(S) WILL BE PROCESSED AND CHARGED AS 3 - DAY TAT.

✓	1 Day		2 Day		3 Day		* Same Day – Must Call Ahead		* Weekend – Must Call Ahead

No.	Client Sample ID	HA Area #	Collection Date	Collection Time	PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	TEM - Bulk	Comments
1	42A		6/25/18	AM / PM	✓					
2	43A, B		6/25/18	AM / PM	✓					
3	44A, B		6/25/18	AM / PM	✓					
4	45A, B		6/25/18	AM / PM	✓					
5				AM / PM						
6				AM / PM						
7				AM / PM						
8				AM / PM						
9				AM / PM						
10				AM / PM						

Released by: Braden Stocks Signature: Date/Time: 6/25/18 1600
Received by: DSBritt Signature: DSBritt Date/Time: 6/25/18 4:58pm

Appendix D

Photographic Documentation

The Railroad Club
2908 P Street

Asbestos Sample Photo Log

Photograph #0001 View of the structure western exterior from the parking area looking south.

View of the 2nd Floor Dance Hall area interior.

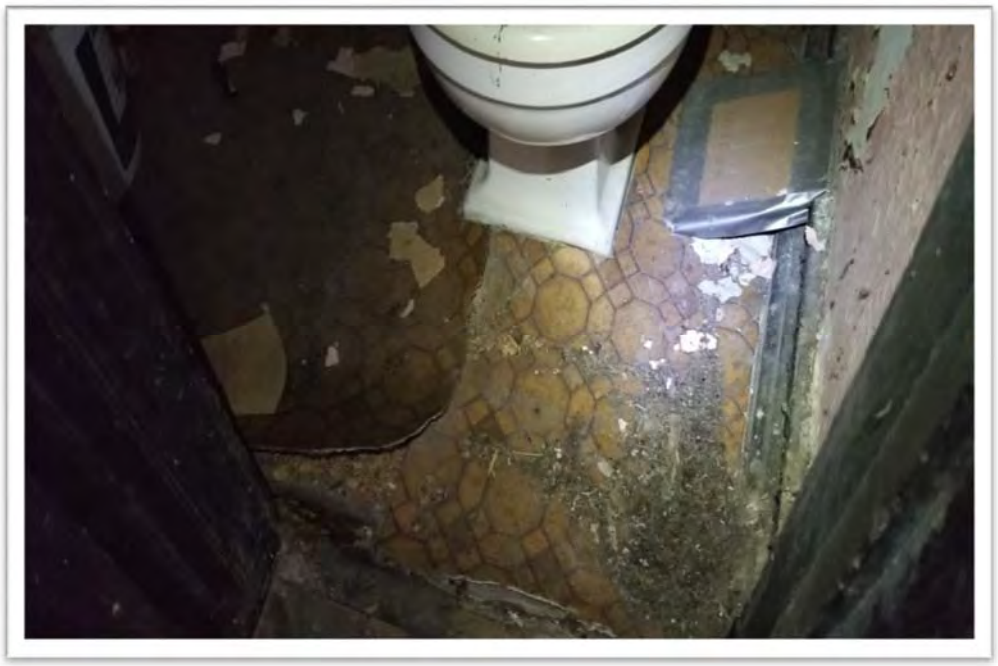
Photograph #0002

Photograph #0003 — View of the White Popcorn Textured Drywall (HA #5) located behind the stage in the 2nd Floor Dance Hall area. The arrow indicates the 5B sample location was collected from an apparent seam between the drywall sheets where joint compound was identified as ACM.

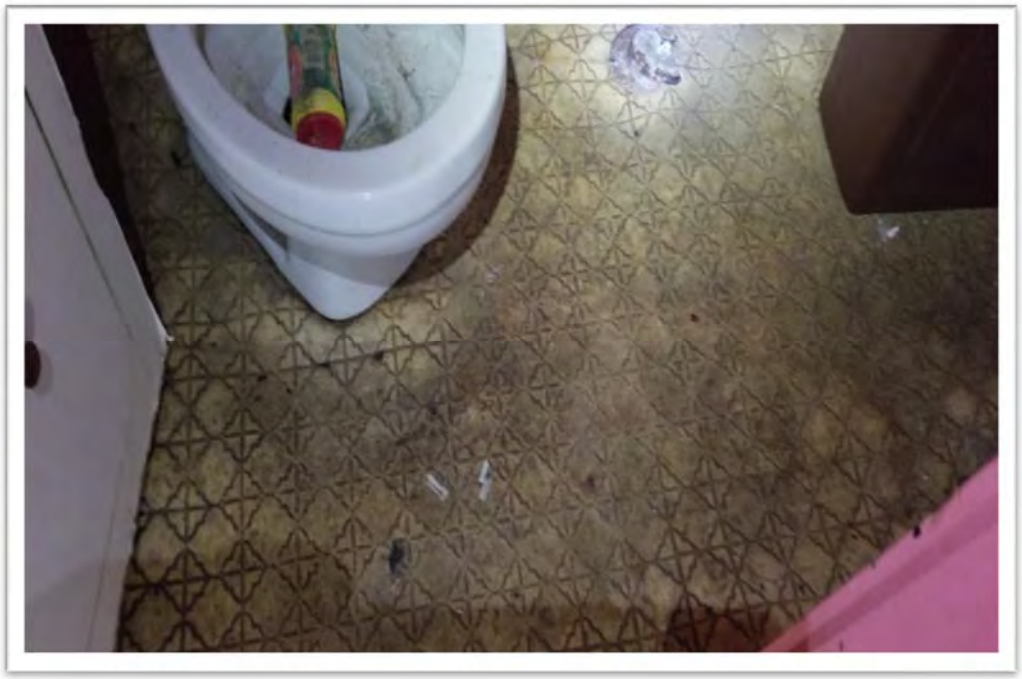
Photograph #0004 — View of the dark red colored carpet associated with the 2nd Floor Dance Hall area stage with some of the associated mastic which tested positive for asbestos (Sample ID#s 8A & 8B) visible.

Photograph #0005 Interior view of the former dry cleaners section of the building located on the southwestern portion of the Property.

Photograph #0006 View of the interior of the 1st floor section that has a kitchen area.



Photograph #0007 View of one of the bathroom floors from the 1st floor kitchen area section where multiple flooring samples collected were found to be ACM. HA #'s 26, 27, 28, 30, & 3 samples were collected from the flooring in this bathroom, the adjacent stall, and storage closet. .



Photograph #0008 View of the other bathroom floor from the 1st floor kitchen area section. Multiple flooring samples (HA #'s 26, 27, 28, 30, 31) were collected from this bathroom and the adjacent bathroom area spaces and tested positive for asbestos. Materials were layered throughout.

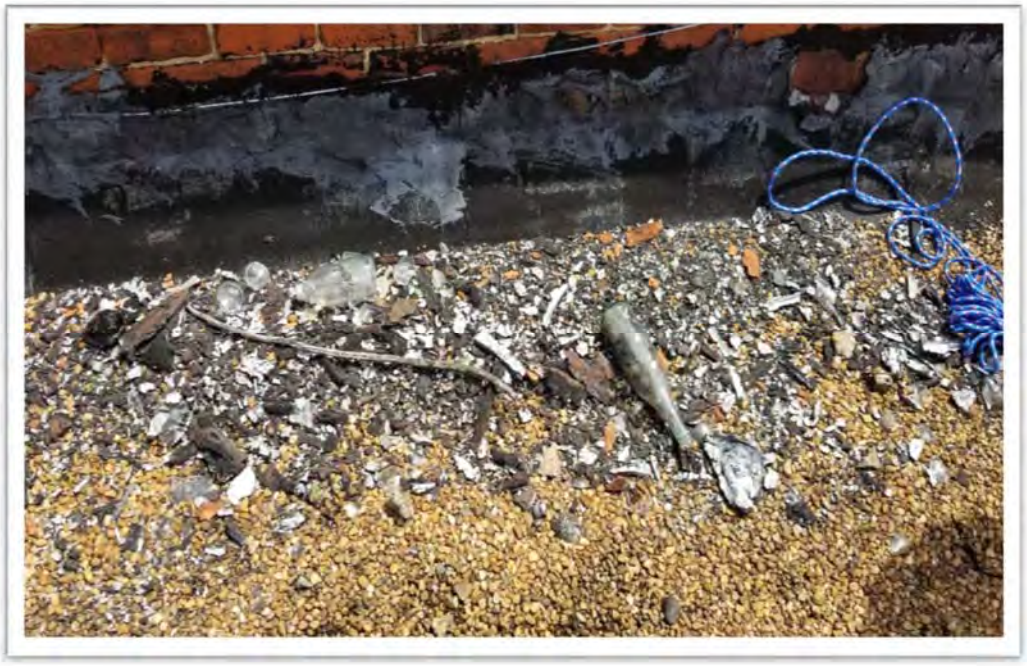
Photograph #0009 View of green vinyl flooring found in the main area of the 1st floor section with a kitchen area (Samples 29A and 29B).

Photograph #0010 View of vertical electrical conduit pipes associated with the electrical panel on the eastern exterior wall of the structure. The arrow points to material collected in samples 39A & 39B. The black tar in the sealant found where the pipes meet the covering contain asbestos.

Photograph #0011 View of the exhaust vent associated with the northeast lower roof (roof section is collapsed). The arrow is pointing to black tar present on the exhaust vent used as a sealant. Samples 40A-40C collected from this material were found to contain asbestos.

Photograph #0012 View of the southwest low roof. Sample 42A (roof core sample) was collected from the location indicated by the arrow and was found to contain asbestos.

Photograph #0013 View of the sealant materials associated with the parapet wall around the southwest roof. Two separate materials (black tar sealant and gray pliable sealant) were both found to contain asbestos in both samples collected of these materials (43A and 43B).



Photograph #0014 View of some of the collected roof debris (Samples 44A and 44B) that is found on the southwest low roof area. The black tar layer and silver paint layer associated with this material were both found to contain asbestos.

Photograph #0015 View of the high roof area. The black tar roofing membrane layer and silver paint collected in samples 45A and 45B. Both of these materials were found to contain asbestos and are ubiquitous on the high roof area.

Photograph #0016 View of the structure eastern exterior from the rear grassy area looking northwest.

The Railroad Club
2908 P Street

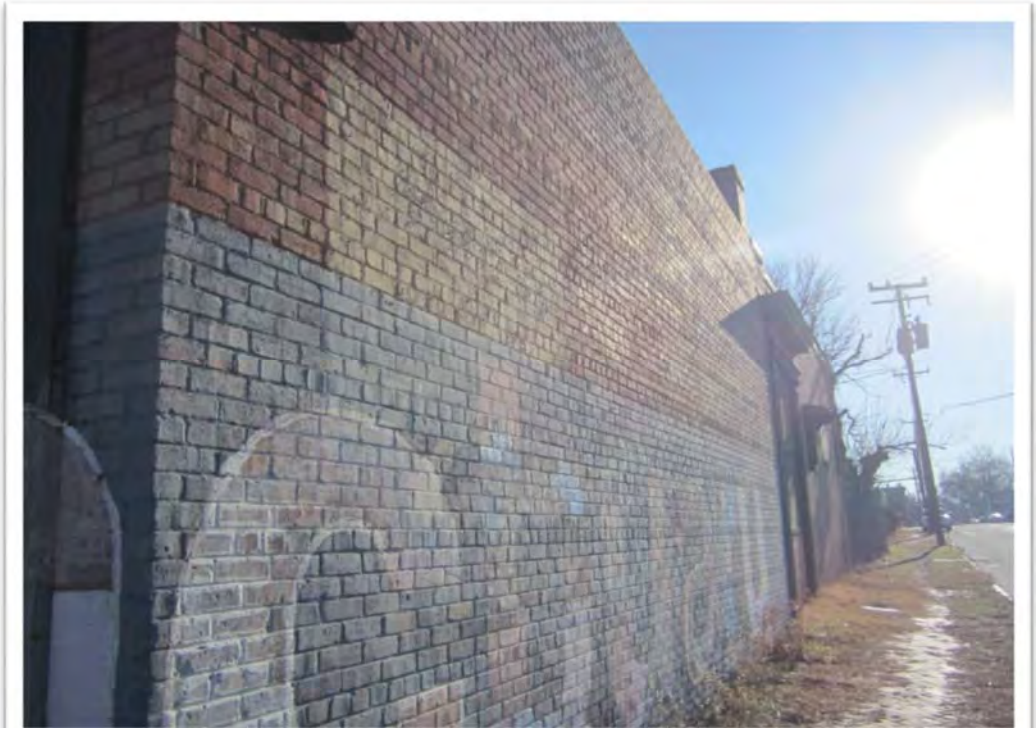
Lead Based Paint Screening
Photo Log

Photograph #0001 View of Lead-Based Paint (LBP) on a metal support column present in the 2nd Floor Dance Hall area.

Photograph #0002 View of LBP on metal support columns present in the 2nd Floor Dance Hall area.

View of LBP on a window frame in the 2nd Floor Dance Hall area.
Photograph #0003

Photograph #0004 View of LBP on a western exterior brick wall.



Photograph #0005 View of LBP on the southern exterior brick wall.

Photograph #0006 Interior of blue LBP present on multiple surfaces in the 1st Floor section that included a Kitchen Area.

Photograph #0007 View of LBPs on the metal ceilings present in the 1st Floor Dry Cleaners Section of the structure.

Photograph #0008 View of LBP on the metal ceiling present in the 2nd Floor Dance Hall area. .